

BATTLE GROUND'S HEALING ARTS APOTHECARY HERBAL MATERIA MEDICA

“Materia Medica” is an old term referring to *medicinal materials* and many old books, plant lists, and reference documents would list the medicinal applications of plants to facilitate the study and use of herbal medicines and the practice of ancient healing. This materia medica is written by Dr Jillian Stansbury and is copyrighted and not to be copied or shared.

***Achillea millefolium* (Yarrow)** *Achillea* is used topically and internally to control bleeding wounds, used topically and internally as an anti-microbial, including staph infections and streptococcal infections. Use *Achillea* topically as a poultice, plaster, skin wash for infected wounds, folliculitis, boils, and fungal infections. *Achillea* is specific for skin lesions associated with digestive symptoms. *Achillea* has general alterative properties for acne, psoriasis, and eczema and improves concomitant intestinal inflammation, IBS, liver congestion. *Achillea* has alterative, cholagogue and antimicrobial properties and may be included in formulas for musculoskeletal complaints of an infectious origin such as osteomyelitis or infectious arthritis, and in formulas as an alterative and cholagogue adjuvant. *Achillea millefolium* is also used for heavy menses, uterine cramping, as a douche for vaginitis. Useful as an alterative to improve the liver's processing of hormones in cases of estrogen dominance. *Achillea millefolium* is also used for or intestinal inflammation, IBS, liver congestion, and is specific for bleeding hemorrhoids, and blood in the stool. *Achillea millefolium* may be included in formulas for oral complaints associated with intestinal inflammation, IBS, liver congestion. *Achillea* is also helpful for eye symptoms related to upper respiratory allergies. *Achillea* is anti-inflammatory due to salicylates, essential fatty acids, sterols and numerous broad acting antimicrobial constituents.

***Aconitum napellus, carmichealii* (Aconite, Monk'shood)** This is a very powerful herb with toxic potential to be used by experienced clinicians only. *Aconitum* may sometimes be included in formulas to help address acute pain and neuralgia. Folkloric literature emphasizes *Aconitum* in the early and initial stages of infectious and inflammatory processes when there is a sense of urgency or fear, restlessness, increased blood flow and hyperemia in the effected part, such as a bursa or joint, and increased sensory nerve irritation such as with gout. Aconite can be applied topically for these same symptoms but bearing in mind that the alkaloids are readily absorbed and can suppress the heart and other nerve centers as readily as it can inhibit local sensory nerves. Arthritic pain, myalgia, gout, and neuralgic pain may all respond to small doses of *Aconitum*. *Aconitum napellus* is potentially toxic and available by prescription only. It is used as a single diluted drop or as a homeopathic for a sensation of numbness and tingling in the tongue, for a coated tongue, and for inflamed gums with significant pain and sensation of burning. PRESCRIPTON ONLY

***Actaea/Cimicifuga racemosa* (Black Cohosh)** Black Cohosh is specific for women with fibromyalgia, anxiety and depression, and hormonal imbalance. The tincture and capsules are useful for all manner of heavy, tight, aching muscular pains, for muscle stiffness and joint pain associated with menopause. Black Cohosh was often combined with Licorice and Salicylates by the Eclectic physicians. The isoflavones have steroid-like compounds and may help treat osteoporosis and alleviate menopausal symptoms. Black Cohosh is also used for anxiety and muscular tension, for tension headaches that move from the occiput forward, and for menstrual headaches, and may also remedy premenstrual breast pain, premenstrual backache, uterine pain, and neuralgic ovarian pains, and is specific for menstrual cramps that are tight and of muscular squeezing quality, worse jarring or walking. Black Cohosh is also indicated for difficult labor due to weak contractions, and for postpartum hemorrhage, and also for late puberty and dysmenorrhea with scanty flow. Black Cohosh is used in men for testicular pain and genital pain associated with prostatic enlargement, as well as for excessive nocturnal emissions. Black Cohosh is also used topically and internally as an antidote for poison ivy, and in formulas for acne at puberty, for restlessness and cramping pain, aching stiffness, for jerking and choreic motions in the muscles. Some recent research has suggested that *Cimicifuga* may be associated with liver irritation and inflammation and should be used with discretion.

Very recent research has revealed a new group of guanidine alkaloids in *Cimicifuga*, one of them named dopargine and said to be a derivative of dopamine. These alkaloids are being credited with neurotransmitter effects including serotonergic actions.¹ *Cimicifuga* has been reported to displace estradiol from docking at estrogen receptors, as well as to bind dopamine receptors and promote dopaminergic neurotransmission.²

***Aesculus hippocastanum* (Horse Chestnut)** The nuts of the Horse Chestnut tree are specifically indicated for engorgement in the lower bowel with hemorrhoids, backache and sense of fullness and pressure in the abdomen and may help treat venous stasis and varicose veins. Horse chestnut may improve slow digestion and is indicated for

liver and portal congestion with tenderness in the right upper quadrant, sense of weight in the stomach with gnawing and aching pain. Horse Chestnut is specific for hemorrhoidal pain that is sticking, or sharp and shooting in character, and for swelling of the rectal mucous membranes with pain and soreness in the anus. *Aesculus* may be included in formulas for osteomyelitis associated with circulatory insufficiency and vague backaches due to circulatory congestion or associated with lower bowel symptoms and hemorrhoids, due to relieving portal congestion, *Aesculus* may also improve aching pain in the legs.

Allium cepa (Onions) Fresh raw onions may be used topically for burns, to promote healthy wound healing, reduce keloid formation. Fresh raw onions may be used topically to relieve the pain of corns or bunions. *Allium cepa* topically for burns, to promote healthy wound healing, reduce keloid formation. *Allium sativum* specific to use internally as tincture or *Allium cepa* as a homeopathic for allergic burning and watering of the nose and eyes, and chronic upper respiratory mucous, and chronic neuralgic pains.

Allium sativum (Garlic) is warming and blood moving herb helpful for vascular condition hyperlipidemia, and hyperglycemia. It is stimulating to mucous membranes and will stimulate and thin respiratory, nasal, and digestive secretions, but may be difficult for those with weak digestive systems to digest and tolerate. *Allium* is best as a synergist or specific in formulas for allergies for those with cold, damp, stuck symptoms or constitutions. Researchers are proposing that sulfur and particularly sulfated polysaccharides in the body may play a role in mast cell activity and histamine release which is aberrant and inappropriately released in allergic conditions. *Allium* is notably high in sulfur compounds which may be important for urinary epithelium integrity, and regulation of mast cell histamine responses. For excessive saliva with a sweet taste or quality, for the sensation of a hair on the tongue or in the throat. *Allium* may assist in correcting intestinal dysbiosis, and act as a warming, stimulating synergist herb best for cold damp constitutions, catarrhal states, constipation or slow peristalsis. *Allium sativum* may be used orally or topically in formulas and protocols for skin infections including staph infections and streptococcal infections, scabies, athlete's foot, thrush and other parasitic, fungal, and infectious conditions of the skin, and may be considered as an ingredient in formulas for warts. *Allium* assists in correcting intestinal dysbiosis and a warming, stimulating herb specific for cold damp constitutions, catarrhal states, constipation or slow peristalsis.

Alnus rubra (Alder) Alder leaves are used medicinally as an astringent ingredient in eyewash formulas, herpes ophthalmia, for chronic eye complaints in "lymphatic constitutions" where lymph nodes are chronically enlarged, chronic ulcerations of mucus membranes and chronic skin lesions. *Alnus* is somewhat tightening and drying best as a synergist or specific for swollen and damp skin or mucous membranes with excess mucous or weeping and secretions. *Alnus serrulata* is specific topically as an antidote for poison oak and ivy skin rashes, and as a skin wash for minor inflammations, pustular eczema, and crops of boils.

Aloe vera (Aloe) *Aloe* is used topically on burns and skin lesions, and internally to support repair and regeneration of epithelial and connective tissues. *Aloe* is high in glutamine and immune polysaccharides making it appropriate for connective tissue inflammation and auto-immune driven inflammatory conditions. *Aloe* is also high in allantoin noted to enhance wound healing by speeding cell proliferation. Since *Aloe* has been noted to increase GAG and Hyaluronic Acid formation, it might be useful for all manner of tissue, muscle and bone laxity from osteoporosis and osteogenesis imperfecta to dermatomyositis and polymyositis. *Aloe vera* is used to allay pain and speed healing of mouth ulcers, as an oral demulcent for burning sensations, as a vehicle to improve the viscosity of herbal tinctures helping them to coat the mouth and gums and to create mouth pastes and gels. Use *Aloe* topically and internally for lips that are cracked and dry. Folkloric herbals report that *Aloe* is specific for bitter or sour taste in the mouth. Aloe gels and liquids may also be used directly in the eyes for ulcerative lesions, for pain relief following irritants, burns, and eye trauma. *Aloe vera* may speed healing of burns and may be used topically prior to radiation therapy to protect the skin. *Aloe* is specific internally in cases of portal congestion and lymphatic congestion in older, overweight, sedentary people. When products contain the *Aloe* rind and not just the mucilaginous pulp, aloe has laxative effects and will promote bile flow and peristalsis.

Althea officinalis (Marshmallow) Marshmallow roots are high in mucilaginous compounds that have a soothing demulcent effect when ingested and can allay the burning sensations of bladder infections and acute stomach ulcer pain. Marshmallow may also be instilled in the eyes to treat ulcerative lesions, treat eye irritation, and treat burns to the eye such as grease splatters, and other eye trauma. The mucilaginous compounds are best extracted by soaking the dried roots in cold water overnight, and gently simmering in the morning.

Ananas comosus (Pineapple) The pineapple fruit contains a mixture of sulphur containing proteolytic enzymes known as bromelain. Bromelain and the consumption of whole pineapple have an anti-inflammatory effect and are used for arthritis, traumatic injuries, and inflammation due to aberrant production of prostaglandins. Bromelain favors the production of the Prostaglandin E series and has been shown to be fibrinolytic. Bromelain has been found to prevent the breakdown of *Curcuma*.

The traditional usage of Bromelain for pain has evolved into bromelain being approved to treat traumatic and surgical injuries of the sinus and nasal passages in Germany, to treat traumatic musculoskeletal pain, to reduce bruising and thrombi risk post-surgically, and improve digestion when taken with food as a digestive enzyme. Current research is also investigating bromelain to whiten the teeth due to proteolytic enzyme effects³, as an alternative to pesticides in some crops⁴, to have anti-cancer effects on breast cancer⁵ and gastrointestinal cancer cell lines⁶, and to alleviate many digestive symptoms of chemotherapy side effects.⁷ Many naturopathic physicians use bromelain in topical treatments for cervical dysplasia and cancer. (Dr Stansbury has written a large research paper on this natural product, available in our ARTICLES tab.)

Andrographis paniculata (The King of Biters) *Andrographis* is a traditional ayurvedic herb used as a liver protectant, immune-stimulant, and anti-infective, and anti-toxin, to include in formulas for autoimmune diseases associated with toxic states, poor digestion, and liver congestion. *Andrographis paniculata* is popular to use in a pill form at the onset of colds, flu, and other common infections.

Angelica sinensis (Dong Quai) *Angelica* is considered to be a “blood mover” in China, due to actions on blood vessels and on individual blood cells making it useful in hypertension, clotting disorders and blood vessel inflammation. *Angelica* is useful for blood vessel inflammation and allergic stomatitis, especially in those with concomitant heart disease. *Angelica* has been found to have antihistamine and anti-serotonin effects⁸ which may be an explanation of the reported anti-allergy⁹ activity. Many *Angelica* species have demonstrated antioxidant activity by a variety of mechanisms including cyclooxygenase and lipoxygenase inhibition.¹⁰ *Angelica* coumarins are noted to reduce mast cell secretions via mechanisms involving a blockage of the influx of calcium.¹¹ *Angelica sinensis* may improve the cytokine profile, reduce excessive cytokine levels and provide overall anti-allergy support.¹²

Like many Umbells, *Angelica* has general systemic anti-allergy effects and can be a tonifying base in all sorts of allergy formulas. *Angelica* species have long been used in China for allergies and asthma, and *Ammi visnaga* used for asthma as well as is the inspiration for the development of a synthetic bronchodilator based on one of its anti-inflammatory flavonoids Khellin. *Angelica* reduces allergic skin and blood reactivity, bronchospasm, and inflammation in allergic airway diseases, and reduces allergic reactivity and spasm in the ureters and bladder. *Angelica* is useful orally, usually as tincture to reduce allergic tendencies in cases of chronic dermatitis, asthma and bladder hypersensitivity. *Angelica* may induce photosensitivity and be part of a protocol use to treat chronic dermatitis, psoriasis or vitiligo, where increasing sun sensitivity has a therapeutic effect.

Angelica sinensis may also be helpful in some pain formulas, specifically muscle discomfort due to vascular congestion, pelvic stagnation, menstrual cramps, or allergies. *Angelica* may also be included in formulas to move more blood through the kidneys to achieve a diuretic effect or move more blood to the extremities to promote repair and regeneration.

Apis mellifica (Honey Bee) *Apis* is not actually an herb but an animal, the honey bee, *Apis mellifica*. It is included here because it is available as a tincture with a long standing history in folk and homeopathic medicine for sensations that are itching, burning and stinging, all common in allergic inflammation. *Apis* can cause these very same symptoms, such as with a bee sting, but when used in highly diluted and homeopathic forms, *Apis* may alleviate these sensations. For red, hot, swollen skin, or acute burning and itching in the skin or in the respiratory passages, *Apis* may be a useful synergist or specific in herbal formulas. *Apis* may relieve constant tenesmic pain in bladder and urethra, burning, stinging that occurs with infections or allergic reactivity of the bladder mucosa. Material doses are suggested for edema and renal engorgement. 3x dilutions are suggested for bladder irritation. Place 1/2 dram of 1:10 *Apis* tincture in a half glass of water to sufficiently dilute and take by the teaspoonful every 15 minutes to hour or use only a few mls of *Apis* tincture with other herbs in an herbal tincture. *Apis* is specific for red puffy eyelid swelling with stinging and burning sensations, injected conjunctival vessels, and photophobia, keratitis, and styes.

Apium graveolans (Celery) *Apium* is specific to reduce allergic reactivity in cases of dermatitis, urticaria, and ulcerative lesions with profuse discharges. *Apium* is also specific for itching blotchy skin lesions and a sensation of creeping or crawling on the skin. Celery juice and seed teas and tinctures are used as nerve, bronchial and urinary

relaxants. For allergic and inflammatory reactivity of the bladder, ureters, and bronchi associated with tightness and spasm *Apium* is also indicated. Essential oil of celery seed may be used with carrier oils and in topical compresses for wheezing, bladder cramps, and renal colic. Apply to affected area and cover with heat. This herb is nourishing and non-toxic suitable for long term use and as a base for allergy formulae. Consuming the powder, long decoctions and fresh juices may be the most powerful form of medicine. *Apium* may be used topically or in large internal dosages in combination with UV light to induce photosensitivity for the treatment of psoriasis and vitiligo.

Apium is also high in minerals and may both provide nutrients to build the bone and connective tissue as well as assist the kidneys in eliminating wastes in cases of gouty arthritis, and *Apium* may benefit some types of muscle pain. Consider including in formulas for osteoporosis and connective tissue fragility as nutritional agents, and in formulas for gout to assist in the elimination of uric acid.

Arctium lappa (Burdock) Burdock roots are used as an alterative ingredient in formulas for chronic eye complaints concomitant with digestive, biliary, or hepatic disorders. Burdock is also used for acne and all types of skin disorders, recurrent crops of boils, and recurrent styes. As an alterative, Burdock improves the liver's processing of hormones, cholesterol and fats, sugar and carbohydrate, normal metabolic wastes, and environmental toxins and pollutants. Due to enhancing the removal of these agents from the bloodstream, Burdock can improve hyperestrogenism, intestinal dysbiosis, and hyperlipidemia. Mild constipation, acne and skin eruptions, coated tongue, vague malaise and are all signs that a person's liver may be inundated with toxins and indications for using alterative herbs such as Burdock. Burdock may be used as a synergist in some allergic formula, and helping the liver to clear these things from the bloodstream helps reduce allergic reactivity. Improving the liver's processing of hormones will benefit PMS, hormonal acne of melasma, hyperestrogenism, breast tenderness and fibrocystic breast disease. Burdock may also be included in formula for auto-immune disorders to help the liver eliminate irritants and pro-inflammatory substances. Also consider *Arctium* for those with poor digestion to improve the absorption and utilization of nutrients and minerals to build bones and connective tissues. *Arctium* may also be used for rashes and eruptions on the extremities and limb pain that radiates downward to the hands and feet, fingers and toes.

Arctostaphylos uva ursi (Uva Ursi, Bearberry) Uva ursi is most used for its arbutin content and consumed as a tea to disinfect the liver in cases of bladder infection. Uva ursi also contains mannose that deters the ability of *E.coli*, the most common cause of urinary tract infections, from adhering to the bladder lining. A strong tea might be used topically to suppress melanocytes the skin in hyperpigmentation disorders. Azelaic acid, found in *Azelea* as well as uva ursi and other family members, may also inhibit melanogenesis to benefit hyperpigmentation disorders. Azelaic acid may also reduce redness in cases of telangiectasia, rosacea, and postinflammatory hyperpigmentation¹³.

Armoracia (Horseradish) Horseradish is one of our best herbs for thinning upper respiratory mucous and provide expectorating effects, especially decongestion the sinuses. Horseradish is used as a tincture or medicinal food for mucous congestion and to treat colds, bronchitis, pneumonia, and sinusitis. The hot spicy indole compounds may also promote the clearance of toxins and hormones from the liver and provide possible anti-cancer effects.

Arnica montana (Leopard's Bane) Oils and salves are used topically, and diluted tinctures and homeopathics orally for bruising, trauma and soft tissue injury, complaints related to muscle strains and overuse. *Arnica* is specific for pain following traumatic injury and for sensations that feel bruised and are tender to the touch. *Arnica* is also said to be specific for pain when it is difficult to get comfortable in sleeping and the bed feels too hard, for body aches and pains that may follow emotional shocks. *Arnica* is also specific for those with weakened blood vessels and a tendency to hemorrhage and tendency to infections, abscess formation, and tissue degeneration following trauma. Human clinical investigations have shown homeopathic *Arnica* to be as effective as anti-inflammatory drugs to alleviate pain following bunion surgery¹⁴, and following rhinoplasty, without the suppression of wound healing that corticosteroids cause.¹⁵ *Arnica* salve is used salves for eyelid trauma, and small amounts or homeopathic preparations are taken orally for eye trauma, double vision following eye trauma, and retinal hemorrhage following head trauma. *Arnica* is also helpful as a homeopathic or to include in tinctures and mouthwashes to reduce pain and speed healing after dental extractions. *Arnica* is also specific for sore swollen, livid or bluish pharynx. *Arnica* is often used topically but is not recommended over abrasions, lacerations or open skin, and is more specific for bruising, strains, sprains, and swellings.

Artemisia absinthium (Absinthe) Absinthe tinctures are extremely bitter and have been used to promote stomach acid as an aperitif, and the plant has a long history of use as an intoxicating cordial. The pungent aromatic absinthe drink can have toxic effects on the central nervous system due to the absinthol it contains, if consumed on a regular

basis. It is believed that Vincent VanGough regularly consumed absinthe and suffered from brain toxicity as a result. However, small amounts, such as 10-20 drops taken in a small amount of warm water can improve digestion, promote stomach acid, and treat parasites. Absinthe is specific for swollen, large protruding tongue, and the tendency to bite tongue accidentally.

***Artemisia annua* (Sweet Annie)** This species of *Artemisia* has been used to treat parasites, and malabsorption historically, and research has emerged in recent years showing anti-cancer effects, and to treat malaria and other serious blood-borne pathogens. A compound in the plant known as artemisinin is recommended by the world health organization for drug-resistant forms of malarial infection. The *annua* species of *Artemisia* does not appear to have the central nervous system toxicity as do other species.

***Artemisia vulgaris* (Wormwood)** Wormwood is a traditional “worming” agent, used to treat intestinal worms and parasites. Due to possible central nervous system toxicity with long-term treatment, the plant is dosed in small short term doses only.

***Asclepius tuberosa* (Pleurisy Root)** As the common name Pleurisy root implies, *Asclepius* is used for lung infections, congestion in the airways, pneumonia and pleurisy. The tincture is included in formulas for cough, bronchitis, chest colds, and for those with a tendency for simple upper respiratory infections to proceed to serious lung complaints and lobar pneumonia. The plant is gentle and well tolerated, combining easily with many other herbs in lung syrups and tincture blends.

***Astragalus* (Milk Vetch)** *Astragalus* is in the bean or legume family and is credited with immune modulating effects, for both immune-deficiency states, and for allergies, to reduce excessive immune reactivity. The roots of the plant are prepared into tinctures and capsules, and is tasty enough to a use in teas, or even boil root slices to reconstitute in immune building teas. We recommend *Astragalus* for people who are ill often and have a slow recovery time, or simply for people who wish to support themselves during winter cold season or during spring hayfever months. *Astragalus* is useful orally to reduce allergic skin conditions, for the tendency to infections, and for auto-immune conditions. *Astragalus* may be included in formulas for chronic musculoskeletal inflammation due to infection, allergy, or auto-immune conditions, and used internally for numerous or chronic warts, especially when accompanied by frequent infections, fatigue, and lassitude.

The immune modulation properties of *Astragalus* have traditionally included both improving poor immune function in those with frequent infections and cancer, as well as those with auto-immune disease and allergic hyper-reactivity. Additional traditional uses for *Astragalus* include hepatoprotective, antidiabetic, respiratory anti-inflammatory, anti-hypertensive, renal inflammation, common viral and other infections, many other complaints. *Astragalus* is an ingredient in numerous classical Chinese herbal formulas including Qilong¹⁶ and Tangfukang capsules, and is particularly common in traditional formulas for aging, or the symptoms of aging, such as weakness and poor stamina, menopausal and osteoporosis formulas¹⁷, heart disease, and fibrotic changes in the tissues.

Animal models of chronic asthma have shown *Astragalus membranaceus* to reduce airway reactivity and reduce hypersecretion of mucous.¹⁸ Animal models of dermatitis have also shown *Astragalus* to reduce swelling and normalize T cell responses following exposures to known allergens and skin sensitizers.¹⁹ *Astragalus* is noted to reduce serum TNF-alpha and NF-kappa B, two inflammatory mediators associated with asthmatic processes.²⁰ *Astragalus membranaceus* may reduce airway reactivity and may be included in asthma formula.²¹ *Astragalus* has also been shown to reduce atopic skin reactivity in mice following exposure to chemical antigens.²² Nuclear Factor (NF) and Tumor Necrosis Factor (TNF) are often elevated in inflammatory processes including asthma. *Epimedium* and *Astragalus* have been noted to reduce NF and TNF in pulmonary tissue and is one explanation as to the ability of these herbs to reduce asthmatic reactivity.²³

Astragalus membranaceus is one of the most widely Chinese herbal medicines, used traditionally for “Kidney Yang Deficiency” whose symptoms are similar to the western concept of adrenal insufficiency or the clinical signs of cortisone cessation.²⁴ *Astragalus* is also traditionally considered to be a “Qi-tonic”, meaning it was held in high regard for improving energy, vitality, and longevity. These properties have also given *Astragalus* a long history of use for muscle wasting, immune modulation, and as an all-purpose tonic. These Qi (or Chi) tonifying properties of *Astragalus*, could also be referred to as an “adaptogenic” action, a term coined by Russian research on Siberian Ginseng, due to its many mechanisms that assist the body in resisting stress, improving immunity, energy, and adrenal function.

Astragalus roots have also been used a medicinal food by slicing longitudinally and simmering in soups, or processing out the gummy sap, referred to as tragacanth, used for culinary purposes, such as a thickening agent, and

medicinal purposes such as to soothe irritated intestinal mucosa.

***Atropa belladonna* (Belladonna)** *Atropa belladonna* is a potentially toxic botanical for experienced herbalists only, used in small drop to single ml doses at any one time. Belladonna is used as a homeopathic or in very small dosages as an herbal tincture and is available by prescription only. Belladonna is used homeopathically or in small doses botanically for skin that is dry, hot, and bright red, such as with streptococcal infections and erysipelis. Belladonna is specific for sudden onset of high fever with marked vascular congestion, with restlessness and throbbing or burning sensations. Belladonna is also specifically indicated for hyperaesthesia and for musculoskeletal complaints associated with shooting pains, twitching and tremors, for spasms and tics. For musculoskeletal complaints, such as gout or acute flares of RA where the joints are swollen, red, hot, or with red streaking up the arm or legs. Also consider *Atropa belladonna* for musculoskeletal complaints associated with fever and heat, infection and delirium, vascular engorgement and restlessness, heat and burning sensations. *Atropa belladonna* is also indicated for skin complaints accompanied by fever and tender swollen glands, for acne rosacea, suppurative lesions or wounds, and rapidly emerging pink, red or pustular skin eruptions. *Belladonna* is specific for dry mouth, throbbing pains in the teeth and gums, boils on gums and acute dental abscesses, and for “strawberry tongue” that occurs with strept throat, with pain and swelling.

Belladonna can be a valuable headache and migraine remedy, specifically indicated for acute pounding, and throbbing pain in the head. Belladonna can be used as a homeopathic or in small doses as a tincture to treat acute vascular congestion where there is warmth and flushing in the face, and throbbing pressure, especially in the temples and forehead. It is also indicated where there are visual disturbances and a sense of heat, all making *Atropa belladonna* highly specific for acute onset headaches involving vascular congestion. 1-4 mls in a 60 ml formula is a possible dosing strategy for chronic headaches. For acute situations 20 to 60 drops in water or herbal tea taken at the onset of vascular congestion may limit the development of migraines and acute headaches.

Use Belladonna as a synergist in formulas for acute infections with fever and inflammation. THIS HERB IS AVAILABLE BY PRESCRIPTION ONLY.

***Avena sativa* (Oats)** *Avena* is a nourishing plant indicated for nervous exhaustion, debility, following chronic disease, digestive derangements associated with alcoholism or drug abuse. Oatstraw is often used as a complementary rather than a lead herb and included when nervous debility, alcoholism or drug abuse had led to mineral depletion, and nervous depletion. Oats are specific for weakness and numbness of limbs associated with exhaustion. Oat straw tea may be used to supplement minerals in those with malnutrition, nervous digestive disorders. Long maceration and gentle simmering will release the most minerals, especially when vinegar or fresh squeezed citrus juice is included in the macerate. Oat straw teas benefit those with weak fingernails, hair, and poor healing wounds, and when used long term may support bone density.

Oatmeal is also credited with medicinal effects, having been shown to lower cholesterol when eaten on a regular basis. Oatmeal is also used topically in the form of bathes, plasters, or poultices. Oatmeal baths and poultices are indicated for all sorts of itching including dermatitis, chicken pox, mosquito bites, pityriasis and other pruritic skin conditions. Use up to 10 cups of rolled outs in an old pillow case, or even better, grind the oats into a powder and prepare into a bath to treat dermatitis, itchy dry skin and nervous skin complaints.

The developing seed pods from fresh oat, referred to as groats, are gathered when still in a milky stage, before the groats are fully ripe. These pods are referred to as milky oats, and are especially recommended for nervous exhaustion, fatigue following chronic disease, and general stress symptoms. Milky oats are naturally high in tryptophan and an unusual amino acid known as gramine, and both are credited with anti-anxiety effects.

***Azadirachta indica* (Neem)** Neem oil may be used topically for fungal infections of the skin, and in very small doses orally for thrush, hairy tongue and oral dysbiosis, as well as to treat intestinal parasites.

***Baptisia tinctora* (Wild Indigo, Woad)** *Baptisia* is specific for oral ulcers, pain and inflammation in the oral cavity, pharynx and tonsils, especially when chronic and associated with fetid breath. *Baptisia* is indicated for sore throats with pain swallowing, for gagging when swallowing solid food. Also specific for a burning sensation of the tongue, a yellow-brown coat on the tongue with red edges, a bitter taste in the mouth.

***Berberis* (See Mahonia)**

***Betula* (Birch)** Birch bark is used to treat allergic conditions and is most indicated as a topical herb to help reduce purulence and reactivity in the dermis. *Betula* preparations have a drying, astringing and tightening effects on the

mucous membranes. *Betula* may also be used internally for pain and inflammation, acute febrile reactions, and musculoskeletal pain, especially when there is swelling or discharge in the affected tissues.

Boric acid - This is not an herb but is stocked in our apothecary's herb section in the form of suppositories. Boric acid is a natural antibiotic, antifungal, pH balancer, weak solutions can be used for bacterial conjunctivitis.

***Boswellia serrata*, *Boswellia sacra*, *Boswellia carterii* (Salai, Salai Guggul, Indian Frankincense)** *Boswellia serrata* is a resinous tree of various warm and arid regions of India, North Africa, and the Middle East. The gummy oleo-resin exuded from injured bark is known as salai guggul that has been used in the traditional medicine of India to treat pain and inflammation, particularly arthritic conditions. *Boswellia serrata* referred to as Indian frankincense to differentiate it from the related frankincense species, *Boswellia sacra*, also referred to as olibanum and mentioned in the bible as one of the gifts of the ancient Magi to give to the infant Jesus. Frankincense is also mentioned in the 1st century AD by Pliny the Elder as an antidote to hemlock, and by the famous Arab physician Avicenna for treating dysentery and vomiting, tumors, ulcers, and fevers.

Fixed and essential oils can be processed various *Boswellia* species and traditionally used in incense, perfumes, and to purify and create sacred space. But most commonly the resin is allowed to harden into small solid chunks that are then pulverized to prepare into topical pastes, incense, perfumes, and oral medicines. Various plants that exude gummy resins are collectively referred to as "gugguals", and *Boswellia* is not to be confused with *Commiphora mukul*, commonly referred to as Guggul.

The research is fairly extensive and tissue and pathology specific, with *Boswellia*'s anodyne and anti-inflammatory actions credited to an ability to reduced inflammatory mediators of many types, and protect various tissues – joints, connective tissue, liver, colon, and brain from pathologic changes, degeneration, and loss of function. On RCT reported topical application of *Boswellia* to improve psoriatic scales in 70% subjects compared to 10% in the placebo group.²⁵ *Boswellia* and/or boswellic acids are shown to reduce inflammation and protect the joints²⁶, the colon in from progressive pathological changes in adenomatous polyps²⁷, inhibit cancer metastases in animal models of colorectal cancer²⁸, the brain following ischemic injury and reducing reperfusion injury²⁹, and the liver³⁰ and pancreatic islets³¹ in diabetic rats, and the liver from granuloma formation due to schistosoma infections.³² *Boswellia* may improve the leukocyte infiltration and superficial ulcers typical of ulcerative colitis. Studies in rats show *Boswellia* to protect colonic mucosa cells from acetic acid induced inflammation, and molecular investigations showed *Boswellia* to prevent tissue injury via increases in lipid peroxidation and nitric oxide and the expression of inducible nitric oxide synthase compared to untreated control animals.³³ Animal studies and pilot clinical trials support the use of *Boswellia serrata* gum resin extract in the treatment of a variety of inflammatory diseases like inflammatory bowel disease, rheumatoid arthritis, osteoarthritis and asthma. In 2002 the European Medicines Agency classified BSE as an 'orphan drug' for the treatment of peritumoral brain edema.³⁴

Additional traditional uses for *Boswellia* include pain and arthritis, diarrhea and dysentery, ulcerative colitis and Chron's disease, lung inflammation including bronchitis, asthma, chronic obstructive pulmonary diseases, and pneumonia and heart disease patients. *Boswellia* is prepared into paste, plasters, skin washes and ointments to use topically on wounds, skin fungus, acne, boils, leprosy, to repel insects, and treat tumors. Additional uses include as an emmenagogue and in dysmenorrhea, for sexually transmitted diseases, and as a diuretic. The use for pain, particularly musculoskeletal pain includes bursitis, cervical spondylosis, tendonitis, osteoarthritis, rheumatoid arthritis, and traumatic injuries, strain, sprains and bruising.

Boswellia has been demonstrated to improve pain and clinical signs in human arthritis patients. *Boswellia* has been shown to be a safe and effective therapy in ulcerative colitis, chronic colitis, experimental ileitis, and Chron's disease, and all inflammatory bowel conditions. One RCT on chronic diarrhea patients with histologically proven collagenous colitis were randomized to receive either oral *Boswellia* 400 mg three times daily for 6 weeks or placebo. *Boswellia* was shown to promote remission more frequently than the placebo, however not histological changes were seen and 1 patient withdrew from the study due to undetailed side effects.³⁵ Another RCT on colitis patients evaluated the effects of *Boswellia* 300 mg, 3 times daily, on reported symptoms compared to sulfasalazine. 14 out of 20 patients in the *Boswellia* group went into remission compared to 4 out of 10 in the sulfasalazine group. Furthermore, 19 of the 20 (compared to 6 out of 10 in the control group) patients receiving *Boswellia* improved in one or more of the measured outcomes including stool properties, histopathology, and blood markers including hemoglobin, serum iron, calcium, phosphorus, proteins, total leukocytes and eosinophils.³⁶ A similar study dosing *Boswellia* at 350 mg 3 times per day for 6 weeks and reported 82% out of *Boswellia* treated patients, compared to 75% of sulfasalazine treated patients went into remission.³⁷

Because standard non-steroidal anti-inflammatory drugs (NSAIDs) have many gastrointestinal and cardiovascular adverse effects, *Boswellia* is an important alternative offering anodyne and anti-inflammatory

activities without significant side effects. *Boswellia* and isolated compounds in the oleoresin, the boswellic acids have been scientifically investigated for over 50 years for their analgesic and anti-inflammatory effects. Many commercial products are standardized to contain 10-15 mcg/ml of keto-beta-boswellic acid (AKBA).

A proprietary *Boswellia* product patented in India (Whole *Boswellia* extract enriched with additional AKBA) has been shown to significantly improve knee pain and symptoms in 30 days compared to placebo in a randomized clinical trial of osteoarthritis patients.³⁸ A similar study dosed *Boswellia* or placebo for 90 days and reported verum to offer significant subjective improvements as assessed by pain scores and assessment questionnaires³⁹, and another RCT reported all patients receiving *Boswellia* to experience a decrease in knee pain, increase knee flexion and walking distance, and decrease swelling after 8 weeks, compared to placebo.⁴⁰ And another similar study dosing 250mg of a proprietary *Boswellia* product noted improvements in osteoarthritic pain as early as 7 days after beginning therapy.⁴¹ Osteoarthritis investigations show *Boswellia* to reduce general inflammatory mediators, as well as inhibits cartilage degrading enzyme MMP-3⁴², helping to protect cartilage in OA patients.⁴³

A RCT on asthma patients showed *Boswellia* at a dose of 300 mg 3 times per day to improve dyspnea, rhonchi, and number of asthma attacks, as well as spirometry readings in 70% of subjects compared to only 27% of controls receiving placebo.⁴⁴ (Dr Stansbury has a large research paper written on this herb in our ARTICLES tab.)

Bromelain, Pineapple Enzyme *Ananas comosus*, *Ananas sativus* (Bromelain) Bromelain is a mixture of cysteine, sulfur-containing proteolytic enzymes that is extracted from the stems, rinds, core, and fruit of the pineapple plant *Ananas comosus*. Pineapple juice and fruit are long standing folkloric remedies for treating poor digestion and digestive upset, supporting weight loss, and treating diabetes, inflammation, and pain. Eating fresh pineapple or regular consumption of fresh pineapple juice is also a traditional remedy for treating intestinal parasites and worms, particularly pinworms. Unripe pineapple and papayas have also been traditionally used topically on skin wounds, and for cosmetic facials to soften the skin and loosen old, devitalized cells. Bromelain may also have mucolytic effects and has been included in many traditional formulas for cough, bronchitis, allergic rhinitis, and lung congestion. The list of painful and inflammatory conditions that pineapple extracts have been used to treat is extensive and includes strains, sprains, phlebitis, angina, menstrual cramps, connective tissue disease, digestive pain and cramping, infectious diarrhea, neuralgia, hemorrhoids, and many other common inflammatory, vascular, infectious, and auto-immune disorders. Bromelain was traditionally combined with Turmeric in the ancient healing traditions of India. Clinical trials that combine bromelain with Turmeric, which will not be detailed here in order to focus on bromelain itself, but the combination is reported to be an effective and safe anti-inflammatory alternative to NSAIDs in patients suffering from degenerative joint diseases.⁴⁵ (See Also *Ananas comosus*, Pineapple)

***Bupleurum flavum* (Sho Saiko To, Chai Hu)** The root of *Bupleurum*, also referred to as Chai hu, is a frequently used herb in Chinese herbal medicine is used to treat a wide variety of inflammatory disorders. The dosage window is small however, and *Bupleurum* appears to have a strong biphasic effect where small doses are hepatoprotective while larger doses are hepatotoxic. Animal research suggests that *Bupleurum* can protect the liver from carbon tetrachloride⁴⁶, tert-butyl hydroperoxide⁴⁷, acetaminophen^{48, 49} and increase the efficacy of 5 fluorouracil against liver cancer⁵⁰.

The root of various *Bupleurum* species are a well-known medicinal plant in China, and listed in on the oldest Chinese materia medica documents, the "Shennong's Herbal". *Bupleurum* was featured for having the action of "soothing liver and relieving constraint", useful for improving both frank liver symptoms and improving emotional instability such as depression, anxiety and phobia. *Bupleurum* is used in folk medicine as an antiinflammatory and pain remedy. Traditional preparations include "baking" *Bupleurum* root in vinegar and including in formulas targeting the liver. Baking *Bupleurum* in vinegar is said to direct the herb and formula to the liver in Chinese medicine traditions, a notion supported by at one rat study.⁵¹

Bupleurum may reduce fibrotic changes in the liver^{52, 53}, improve obstructive jaundice⁵⁴, and decrease hepatocarcinogenesis in chronic liver inflammation.⁵⁵ *Bupleurum* exerts a hepatoprotective effect in galactosamine-induced liver inflammation in mice, significantly reducing aspartate transaminase (AST), alanine transaminase (ALT), alkaline phosphatase (ALP) and lactate dehydrogenase (LDH) activities and increasing glutathione and superoxide dismutase at a dose of 400mg/kg per day. (Dr Stansbury has written an extensive research article on this herb, available in our ARTICLES tab.)

***Cactus grandifloras* (See *Selenicereus*)**

***Calendula* (Pot Marigold)** *Calendula* is an all-purpose skin herb for treating wounds and trauma, to promote healing, and treat skin infections. *Calendula* may minimize scarring in those with a tendency to keloids or easy

scarring. *Calendula* may be used topically in cases of erysipelas. Use salves, ointments and compresses topically on the fissured nipples of nursing mothers. Dilute *Calendula* tea with rose water for use in the eyes in cases of conjunctivitis. *Calendula* may be used topically and internally simultaneously in the treatment of chronic skin conditions and poor healing wounds. *Calendula* has only moderate anti-allergy effects but can be a useful synergist in numerous allergic conditions involving inflammation and allergic reactivity of mucous membranes, with tendency to skin or secondary infections. For eye infections and allergic reactivity of the conjunctivitis, *Calendula* is appropriate in eyewash formulas. For skin, bowel, and vaginal inflammation to use as a skin compress, herbal tea, or herbal douche respectively. For allergic reactivity of ear canals, such as swimmer's ear and excema of the ears, *Calendula* is useful in ear lavage and swab formula. For oral inflammation and digestive symptoms following ingestion of food allergens use *Calendula* in gargles and digestive teas. *Calendula* is also specific for inflammation, ulceration and pain of oral, digestive, and urinary mucosa. Thus, *Calendula* may be used in a wide variety of forms and preparations: orally as teas, succus, tinctures, and topically in eye washes, ear lavage, skin compresses, sitz baths, and vaginal douche. *Calendula* may be included in musculoskeletal formulas when there is chronic infections and poor healing. *Calendula* may improve microcirculation in the dermis and can be considered to slow the progression of collagen vascular and other connective tissue diseases and prevent fibrotic degeneration.

Calendula is useful as an eyewash ingredient for traumatic, inflammatory, and infectious conditions of the conjunctiva. *Calendula* can act as a mucous membrane tonic in cases of dry eyes or conjunctival lesions, and as an all-purpose mucous membrane rinse. *Calendula* has antimicrobial, anti-inflammatory, and vulnerary for oral and ocular lesions.

Camellia (Green Tea) Green Tea is an all-purpose systemic antioxidant, anti-inflammatory and anti-allergy plant, and may help all sorts of allergies when consumed liberally as a daily tea. The antioxidant action is credited with reducing cancer and chronic disease, and the caffeine-like compounds act as a gentle metabolic stimulant for hypothyroidism and deficiency states. *Camellia* may also be used topically to reduce allergic skin symptoms, and may improve the absorption of other compounds in topical formula such as compresses, lavages, and sitz baths. *Camellia* is a natural source of fluoride to include in mouth-rinses and daily teeth for general health and prevention

Capsella bursa-pastoris (Shepard's Purse) reduces histamine's ability to increase membrane permeability according to modern research. Traditional literature mentions *Capsella* frequently to reduce excessive bleeding and thus *Capsella* might be used as a synergist for allergic lesions that become raw and bleed.

Capsicum annuum, frutescens (Cayenne Pepper) Cayenne is included in formulas for infections, including streptococcal infections especially when associated with chilliness and mucous congestion. *Capsicum* is specific for dry mouth or for thick viscid mucous in the mouth. *Capsicum* may be diluted with glycerin and taken orally to promote the healing of extensive bruises. Cayenne is specific for leg pain and sciatica that is worse bending or coughing. One drop may be applied to oral herpes lesions, or added in small diluted amounts to formulas for stomatitis, especially when there is a fetid odor in the mouth. *Capsicum* may be used topically to promote hair growth in cases of alopecia. Use *Capsicum* as a synergist in cold constitutions, or for elderly patients with exhaustion, atonic dyspepsia with much flatulence. *Capsicum* may enhance the absorption of other ingredients in herbal tinctures. *Capsicum* has pain relieving effects, in part due to the ability to deplete the neurotransmitter, substance P from pain fibers, creating a warm to hot sensation the overrides pain sensations. Cayenne is also considered to be a counter irritant, stimulating a local inflammatory response that may often help resolve chronic conditions such as excema, slow healing sprains, and or allergic inflammation. Cayenne is also a circulatory stimulant. *Capsicum* may be used as a synergist in cold constitutions, elderly with digestive atrophy, and atonic dyspepsia with much flatulence. *Capsicum annuum*, and all hot peppers, have a thermogenic effect, temporarily rising body heat, and may support weight loss by that mechanism.

Caulophyllum (Blue Cohosh) Blue Cohosh is indicated for tight, tensive, drawing pains and stiffness in the small joints, fingers, toes, wrists and ankles. Consider *Caulophyllum* for aching in the wrists and for wrist and hand pain worse with making a fist. *Caulophyllum* is included in arthritis and musculoskeletal pain formulas where joint and muscle pains are erratic and frequently change location.

Ceanothus americanus (Red Root) Ceanothus is traditionally used for liver congestion, pelvic and portal congestion, vascular congestion and hypertension that accompanies or underlies congestion in the skin and tissue. *Ceanothus* is specifically indicated for breast cysts and mastodynia, heavy menses, and anemia. *Ceanothus* may improve chronic vaginal infections with discharges occurring in the obese, those with poor circulation, and

diabetics. *Ceanothus* is specifically indicated for the doughy skin often seen in long term diabetics or associated with digestive dysfunction and chronic fluid stagnation and lymphatic congestion.

Centella asiatica (Gotu Kola) *Centella* is a very nourishing herb upon which a formula might rest especially when skin or mucous membrane lesions and ulcers are present. *Centella* has been emphasized folklorically for intestinal ulceration, fibrosis and malnutrition. *Centella* may act as a nutritive trophorestorative herb in formulas for herpetic, auto-immune, and aphthous ulcerations of the oral mucosa.

Centella can be included in formulas to promote healing and structural integrity of the skin, joints, mucous membranes, and connective tissues in cases of injury and inflammation, intestinal ulceration, and malnutrition. Following injury, consider *Centella* to improve connective tissue integrity and repair. *Centella asiatica* can also have a tonifying effect on mucous membranes. In cases of chronic conjunctival derangements, eye trauma, and visual complaints following head trauma. *Centella* can be included in teas and formulas. *Centella* is also indicated for styes and chronic ulcers or eyelid lesions, as well as complementary support for macular degeneration and atrophic conditions of the eye.

Centella has a “green” sour flavor that is tolerable in a tea, or can be used as a tincture. It is not commonly available in commercial pills, but *Centella* powders can be encapsulated in house as the herb has so many potential uses.

Centella is specific for allergic reactivity with a tendency to keloid formation in the skin, fleshy growths with chronic eye allergies, nasal polyps with chronic hay fever, scarring in the bladder with interstitial cystitis, auto-inflammatory and allergic inflammation in the joints and connective tissue, fibrosis, scleroderma. In cases of dermatitis, *Centella* is most indicated for dry scaly or papular eruptions, thickening of the skin, exfoliation, and scales, as opposed to wet suppurative eruptions. *Centella* is also indicated for psoriasis and skin eruptions affecting the soles of the feet, and for excessive sweating. As a connective tissue tonic,

Cereus (See *Selenecereus*)

Chamaelirium luteum- *Chamaelirium* is a little studied herb used traditionally as a female herb and uterine and reproductive tonic, specifically indicated for a sense of weight, or congestion in the pelvis. *Chamaelirium* is indicated for labor-like expulsive menstrual cramps and recurrent miscarriage, and is used as a partus preparator, meaning a tonic used in the last trimester of pregnancy to support labor and delivery. Some early American herbals mention *Chamaelirium* for mental apathy and lack of libido, and for mental and physical weakness.

Chelidonium (Celendine) *Chelidonium* is a cholagogue herb, meaning an agent that promotes bile production in the liver and flow from the gallbladder. Agents that promote bile flow can help treat jaundice, biliary disease, gallstones, as well poor fat digestion and malabsorption. Improving bile flow with *Chelidonium* or other cholagogues can help treat acne, boils and skin complaints by helping the liver to eliminate wastes, process hormones, and better absorb fat soluble vitamins import to skin health. Skin disorders associated with digestive and liver disorders will often respond to *Chelidonium*.

Chelidonium is specific for itching and dryness of skin, jaundice, swollen bile ducts, chronic nausea and stomach pain, right upper quadrant pain that radiates to the shoulders, and a full pale tongue. A large flabby tongue with indentations of teeth on lateral margins, yellowish coat on the tongue are indications for the use of *Chelidonium*. Constipation with dry hard stools. *Chelidonium* is also indicated for abnormal stools, bright yellow, or clay colored, or light colored stools that float. *Chelidonium* is also useful as an antimicrobial wash for profuse discharges and tearing in the eyes, for jaundiced eyes, as an alterative ingredient in formulas for eye complaints associated with liver, gallbladder, or digestive disorders. Some old herbals claim *Chelidonium* to be specific for orbital neuralgia.

Chimaphila umbellata- Tooth pain with the sensation that the teeth are being pulled, tooth pain that is worse after chewing and physical exertion.

Chionanthus (Fringe Tree) Specific for a broad flabby tongue, and a dry sensation in the mouth that is not improved by drinking water. The plant is considered to be a lymphatic herb for doughy skin, poor circulation, and stagnant fluid.

Cimicifuga racemosa (See Actae) (Black Cohosh) *Cimicifuga* is first and foremost a nerve and musculoskeletal herb with numerous hormonal and neurotransmitter balancing effects. *Cimicifuga* contains isoflavones known to bind estrogen receptors and exert an estrogenic effect, explaining its traditional use for menopausal symptoms and

menstrual cycle disorders. *Cimicifuga* is specific for acute and chronic musculoskeletal and joint pain, autoimmune reactivity, tense tight, heavy aching pain, uterine and skeletal muscle cramps, especially when associated with anxiety, depression, and emotional turmoil. Modern research has shown the plant to promote dopamine in the brain contributing to its anti-anxiety effects. Black Cohosh has also been recommended topically and internally as an antidote for poison ivy. *Cimicifuga* may support tooth density, although research is lacking.

Cimicifuga racemosa is known to affect dopamine and the neuroendocrine system benefiting both mood disorders and hormonal imbalances. *Cimicifuga* is noted to exert activity at both estrogen receptors locally^{56,57} and in the pituitary at the level of the neuroendocrine system.^{58,59,60} *Cimicifuga* contains isoflavones that are believed to exert amphoteretic actions at estrogen receptors.

Cinamomum verum, zelandicum (Cinnamon) Cinnamon has many medicinal uses including treating vascular inflammation associated with high lipids, sugar, blood pressure, cold hands and feet, poor microcirculation, and vascular stasis. Cinnamon may be included in skin allergy formulas to help move energy to the outer body, and included in formulas for skin fungus and chronic skin infections in diabetics and those with poor peripheral circulation. When fungus, usually due to underlying hyperglycemia, is triggering allergic reactivity, Cinnamon is specifically indicated. Cinnamon essential oil diluted with water and used as a topical disinfectant. *Cinnamomum* species are effective to treat post-partum hemorrhage, menorrhagia due to fibroids and polyps, and heavy menses worse motion and jarring. Cinnamon combines well with *Erigeron* for menorrhagia, or with Ergot for post-partum hemorrhage. Cinnamon may also reduce bleeding in the digestive, urinary and respiratory tract, and can be diluted to create useful douche for vaginitis. Cinnamon has been well-researched in the modern era for its hypoglycemic and hypolipidemic action and is increasingly seen in formulas for diabetes and high cholesterol. A general circulatory effector with warming properties in the skin and GI. May irritate the intestines in those with IBS. To consider in formulas for osteomyelitis secondary to diabetes and circulatory insufficiency.

Cnicus benedictus (Blessed Thistle) An alterative herb that may be used for skin, musculoskeletal, and intestinal complaints related to poor digestive and hepatic function. *Cnicus* is useful as an alterative to improve the liver's processing of hormones, carbohydrates and lipids.

Cnidium – *Cnidium* is an Umbell family plant used orally to reduce allergic tendencies in dermatitis. It is less commonly available than *Angelica* and *Apium* and thus they tend to be used more often. *Cnidium* is a potential photosensitizing agent for cases of vitiligo, psoriasis, and chronic skin complaints, helping to reduce allergic tendencies in hyper-reactive inflammatory conditions.

Coffea species – Use topically on the skin to enhance the penetration and absorption of other herbs or topical agents.

Colchicum – Used pharmaceutically in the form of the isolated alkaloid colchicine to halt white blood cell activity in cases of acute gout and gouty arthritis. Rarely used botanically, *Colchicum* may be considered in homeopathic or in very diluted preparations for acute muscle, joint, and bone pain. *Colchicum* great toxic potential so is used in specially prepared medications by skilled clinicians and by prescription only. *Colchicum* is specific for pains that are excruciating to the touch, for tearing stinging pains, for pins and needles sensations, pains that are worse in the evening and with warm temperature.

Coleus forskolii (Coleus) *Coleus* is a warming, moving, and stimulating herb, though is not particularly harsh or irritating. *Coleus* is most indicated in constitutions that are deficient or stuck, where there is chronic low grade inflammatory reactivity and slow metabolism. *Coleus* may be used as a synergist in allergy, psoriasis and chronic dermatitis formulas especially where there is atony, sluggishness of general metabolic functions, and excessive inflammatory response. *Coleus* is difficult to find in any form other than a tincture.

Collinsonia (Stone root) This herb is used for hemorrhoids and vascular congestion, especially when there is a full, heavy, aching sensation. *Collinsonia* is also helpful for hoarseness of the voice with full, heavy sensation, laryngitis. *Collinsonia* is specific for vascular congestion of the larynx following vocal stress

Commiphora mukul (Guggul, Gum Guggul) Use Guggul for elevated lipids due to diabetes, hypothyroidism or slow metabolism, sense of weight or dragging in the pelvis, as a mucous membrane stimulant and antiseptic, and as a specific for excessive discharges. The plant is a relative of Myrrh and also exudes a gummy resin, credited with numerous medicinal effects.

***Commiphora myrrha* (Myrrh)** *Commiphora myrrha* is a hot antimicrobial herb with particular affinity to the mouth, gums and oral and pharyngeal mucosa. Use this herb as a specific or synergist in cases of mucosa lesions in the mouth including infectious or inflammatory causes such as lichen planus and oral manifestations of auto-immune or other systemic illnesses. When infectious processes lead to severe inflammatory reactivity, or when allergic and inflammatory reactivity lead to oral ulcerations and lesions, include Myrrh in the formula. Due to its heat and extremely strong flavor it is not usually a lead herb and is usually not more than a quarter or less of an herbal formula. It is most commonly used as a tincture, although dry powders and essential oils are also useful.

***Conium maculatum* (Poison Hemlock)** *Conium* is a potentially toxic botanical for experienced clinicians only. The topical use of *Conium* may allay the pain of cancerous growths and ulcer on the skin, but care must be taken as even topically enough *Conium* can be absorbed to cause systemic toxicity such as bradycardia and suppression of nerve regulation. Available by prescription only.

***Convallaria majalis* (False Lily of the Valley)** Lily of the Valley is primarily a remedy for congestive heart failure, but also specific for stasis of fluid including a tongue that feels sore and scalded, a broad thick, heavy, dirty looking coat on the tongue, and a metallic taste in the mouth. *Convallaria* may be placed in the long term formula in those with both heart disease and chronic gingivitis and is specific for a sore throat that is worse inspiring, and grinding of the teeth. This plant contains cardiac glycosides and should be used by experienced herbalists only. Available by prescription only.

***Coptis trifolia* (Gold Thread)** The small roots are yellow in color due to containing berberine and hydrastine, also found in Oregon Grape and Goldenseal. *Coptis* is used for infections conditions of the skin including antibiotic resistant staph infections, strept throat, and to prepare astringent antiseptic washes for mucous membranes. *Coptis* is indicated for chronic infections in mucous membranes, and for fungal infections of mouth, skin, and vagina, and for fungal infections related to intestinal dysbiosis. Use *Coptis* orally for thrush in babies, in the mouth for aphthous ulcers, and orally and/or topically for chronic infections in diabetics.

Cordyceps *Cordyceps* is an unusual parasitic fungus that grows out of decaying worms and beetles at high altitudes in Tibet. *Cordyceps* is used to improve immune function, as a synergist in formulas for chronic infections, and is specific for immune deficiency, and serious infections with difficult recovery.

***Coriandrum* (Coriander)** The essential oil or other concentrate may be used topically as a photosensitizing agent in cases of psoriasis or vitiligo.

***Crataegus spp* (Hawthorn)** Hawthorn is an all-purpose heart and blood vessel tonic used a nourishing base in formulas to treat high blood pressure, low blood pressure, and to protect the blood vessels in cases of hypertension, hyperglycemia, and hyperlipidemia. Hawthorn is also indicated to treat circulatory insufficiency and congestive heart failure. Hawthorne is a useful supportive measure in women with heart palpitations and hypertension that develop during the menopausal transition. Hawthorn may improve those who tend towards easy contusions with slow recovery, vascular inflammation and allergic reactivity including rosacea, hives, telangiectasias, and phlebitis, and may improve excessive perspiration. Include hawthorn in formulas for extensive bruising and skin trauma cases, and to improve microcirculation in the skin, and as a vein tonic for those with varicose veins. Hawthorn may improve blood vessel health and integrity, and can be used as a vascular anti-inflammatory, for diabetic retinopathy, to improve circulation in the eye for cases of cataracts, macular degeneration, and papilledema. Hawthorn may also stabilize blood cells and provide an anti-histamine effect in cases of allergies, asthma, hives, and other allergic disorders. Hawthorn also has an affinity for the heart and the heart chakra and is included in formulas for grief, fear, sorrow, and helps to open the heart to joy. Our apothecary stocks both hawthorn berry and the dried leaf and flower.

***Curcuma longa* (Turmeric)** *Curcuma* is an all-purpose systemic antioxidant, anti-allergy, anti-inflammatory and antimicrobial, herb useful internally to promote skin repair, prevent keloid formation. *Curcuma* is a strong enough antimicrobial to treat Staph infections and other infections and may reduce excessive dermal proliferation in cases of keloids, psoriasis and allergic inflammation due to the presence of pathogens, fungus, microbes, or allergens. *Curcuma* is also an excellent hepatic support herb and general alternative to assist in hormone and toxin clearance via the liver, which may also in turn reduce allergic reactivity. *Curcuma* may improve intestinal dysbiosis and propensity to fungal and other infections that may trigger allergic hyper reactivity. The herb can be used in culinary

ways, and is available dry, as a powder, and is a popular tincture. It is also common to find *Curcuma* in commercial pill formulas for inflammation and liver support. It is broad acting, warming and non-toxic and may be a base or synergist in herbal formula for allergy. It may be a specific when liver or biliary issues underlie allergic conditions.

Due to broad antioxidant, anti-inflammatory, anti-microbial, *Curcuma* may protect connective tissue in cases of autoimmune disorders of the mouth, and may be used in formulas for chronic eye complaints, as a supportive ingredient in formulas for chronic, degenerative, or infectious eye complaints. *Curcuma* may reduce excessive collagen and fibrin deposition in inflammatory disorders of the muscles, blood vessels and connective tissue. *Curcuma* is useful in cases of traumatic injury with extensive bruising and muscle inflammation, and may reduce excessive dermal proliferation in cases of psoriatic arthritis.

Use *Curcuma* to protect the liver if using Retin A due its hepatoprotective properties. For acne or melasma related to elevated hormones, *Curcuma* may assist in hormone clearance via the liver. *Curcuma* may improve lipid and carbohydrate metabolism in cases of chronic fungal infections in diabetics, and in cases of hyperlipidemia. *Curcuma's* alterative properties may improve intestinal dysbiosis and the propensity to fungal and other infections.

***Cynara scolymus* (Globe Artichoke)** Artichokes are a type of thistle, and many thistles have liver protective effects. *Cynara* can be used as a liver tonic, and can improve cholesterol and hormonal imbalance by supporting the liver's processing of these substances. *Cynara* has been traditionally used as an alterative ingredient for eye complaints related to liver or digestive disorders. The vegetable-like flavor makes *Cynara* useful for teas.

***Dioscorrea villosa* (Wild Yam)** Wild Yam is mainly a remedy for digestive cramping and poor digestion with much gas, but also indicated for a coated tongue, dry mouth, and bitter taste when associated with these symptoms. However, because Wild Yam contains steroid-like saponins, the roots have been used as a raw material to manufacture progesterone and other hormones, and the plant has recently become popular as a cream to treat menopause and female hormone imbalances. Due to the steroidal nature of the plant, Wild Yam is also used as a general endocrine and reproductive tonic.

***Echinacea* species** (Cone Flower) *Echinacea* is specific for septic conditions with emaciation. *Echinacea* is effective for inflamed tonsils that are purple or blue rather than red, for oral and tonsillar ulcers, and for grayish mucous and exudates in tonsillar crypts, and is an ingredient in our "H.E.M.P." (*Hydrastis*, *Echinacea*, Myrrh, and *Phytolacca*), for tonsillitis and strept throat. *Echinacea* is a useful antimicrobial ingredient in formulas for infectious complaints of the eyes including, influenza with eye symptoms, herpes ophthalmia, infectious conjunctivitis. *Echinacea* will also treat various septic conditions where emaciation and debility accompany, and may be included in digestive formulas with liver herbs in cases of hepatitis, cirrhosis. *Echinacea* may be combined with astringent herbs in cases of infectious diarrhea and food poisoning, and can support recovery from acute or chronic appendicitis. *Echinacea* may be included in formulas for oral canker sores, receding gums, and gums that bleed readily. *Echinacea* is also indicated for cheilosis, cracked swollen lips, and for sore swollen tongue with white coating and excess saliva. *Echinacea* is also specific for infectious skin conditions, boils, carbuncles, and pustular eruptions, and for septic conditions with emaciation and debility. *Echinacea* can improve chronic folliculitis. *Echinacea* may be used topically as both an anaesthetic and antiseptic. *Echinacea* may reduce fetid odor when applied to gangrenous and cancerous ulcerations. *Echinacea* is specific for skin lesions associated with decay such as tibial ulcers and gangrene. Use *Echinacea* orally for bad breath due to dental and gum diseases, and topically for frostbite, for snake bites and insect stings. Use *Echinacea* internally to reduce itching in cases of urticaria, and to reduce the tendency to abscesses associated with poor digestion and "bad blood." Include *Echinacea* in formulas to deter the breakdown of hyaluronic acid that occurs following bites from venomous insects and snakes, and *Echinacea* may help connective tissues from destruction in cases of infectious, toxic, and inflammatory processes.

***Elettaria cardamomum* (Cardamon)** Digestive gas and bloating, distensive pain, belching with peptic ulcers, flatulence with IBS.

***Eleutherococcus senticosis* (Siberian Ginseng, Eleuthero)** Eleuthero is an adaptogenic herb and adrenal tonic used to support energy, hormonal balance, and recover from long term stress. Nervous symptoms and fatigue will often respond to adaptogens when taken for 3 to 6 months, sometimes longer. An adrenal tonic, Eleuthero is useful for treating nervous symptoms, fatigue, muscle pain and poor concentration, and can help treat endocrine imbalances and immune insufficiency, especially when related to stress, overwork, and associated with muscle weakness, and emotional instability.

Eleutherococcus may also be included as a synergistic herb to treat a wide variety of immune, allergic, hormonal

and stress-related issues. Include *Eleuthero* in skin formulas where underlying allergies or atopic tendencies are present. *Eleutherococcus* is specific for individuals with poor immune response and tendency to infection, or excessive immune response and autoimmune skin conditions. Include *Eleutherococcus* in formulas for warts and chronic viruses, and as a synergist in formulas for chronic digestive irritability associated with nervous affectations. Include *Eleuthero* in formulas to treat muscle pain where underlying allergies or atopic tendencies are present, as well as for individuals with poor immune response and tendency to infection, or excessive immune response and autoimmune skin conditions. Include *Eleuthero* as a synergist in formulas for chronic digestive irritability associated with nervous affectations.

Ephedra species (Mormon Tea) *Ephedra* is a folkloric classic for airway reactivity, asthma, hayfever, hives, and eczema. It is mildly stimulating due to caffeine-like constituents when used as a tea, and may become very stimulating when concentrated in pills and taken in large dosages. The herb can occasionally promote jitters and heart palpitations in those sensitive to caffeine, or especially when used in large, repetitive dosages. *Ephedra* is available mainly as a tea at the present time, though many herbalists make their own tinctures. It is not particularly nourishing and due to its stimulating effects, and is most used as a specific or synergist for a short duration, such as for a cold that is triggering asthmatic dyspnea, or acute episodes of hives. *Ephedra* may also be included in formulas for eye complaints related allergies, and hay fever. *Ephedra* is available by prescription only.

Equisetum arvense (Horsetail) *Equisetum* is a nourishing, high mineral herb used especially to enhance connective tissue restoration. *Equisetum* is often used in teas to provide minerals in cases of malnutrition and malabsorption, and long soaks with a bit of vinegar or lemon juice helps to make the minerals more bioavailable. For skin, musculoskeletal, and urinary allergy and inflammation *Equisetum* may make a good synergist in tea or tincture formulas. Topical application of *Equisetum*, in the form of tub soaks and sitz baths has been used historically for musculoskeletal, arthritic, and auto-immune disorders. *Equisetum* may help the kidneys excrete heavy metals and others waste, and thereby improve toxicity, hypersensitivity, and autoimmune reactivity. For intestinal ulcerations, *Equisetum* may be included in teas as a nutrient to help rebuild connective tissues and mucous membranes.

Consider *Equisetum* for oral ulcerations, as a tissue trophorestorative and nutritive herb to help rebuild connective tissues and mucous membranes. Use *Equisetum* in teas and capsules for poor healing wounds, scars, keloids, and for skin that is easily injured and friable. Due to its high mineral content, *Equisetum* may help those with fragile fingernails, dry frizzy hair and chronic strains and sprains. Include *Equisetum* in teas to provide minerals in dermatology cases where malnutrition and malabsorption may underly poor healing capacity.

Eschscholtzia californica (California Poppy) The California poppy contains weak opiate compounds and can be a useful herb to help wean people from prescription opioids such as vicodan and oxycontin, or even withdraw from heroin. North American native peoples used fresh pulverized roots topically on painful teeth, and California Poppy can be used in a wide variety of pain formulas. California Poppy is indicated for symptoms of anxiety, muscle tension, and poor sleep, and as a complementary component of formulas for adrenal exhaustion due to long term stress. California Poppy is useful as a complementary component in formulas for digestive disorders that are associated with stress and anxiety.

Eucalyptus spp (Eucalyptus) *Eucalyptus* is a powerful antiseptic, expectorant and diaphoretic, well known for its affinity for the lungs and to use in saunas and vapor baths to open the airways in cases of cough, bronchitis, and asthmatic congestion. *Eucalyptus* is specific for herpetic skin eruption with swollen glands and for nodular swelling over joints such as with rheumatoid arthritis and autoimmune conditions affecting the connective tissues. Use *Eucalyptus* topically to mask the odor of fetid skin lesions such as gangrene and cancerous ulcers as well as provide pain relief. Include *Eucalyptus* in mouthwash formulas for bad breath and oral lesions. Use *Eucalyptus* essential oil topically for head and body lice.

***Eugenia* (Cloves)** Cloves are used as a pain-relieving essential oil that may be used topically to allay teething and gum pain, and to prepare an anti-septic mouth wash. Place several drops of Clove oil on a cold wet washrag for teething babies. Clove oil may also treat neuralgic pains and reduce itching in chronic eczema. The essential oil may also kill lice and have a repellent activity towards ticks, fleas, and mosquitos. Clove oil is extremely strong and potentially irritating and is usually diluted with a carrier oil or dotted on a moist compress before applying to the body. It is never appropriate in the eyes, and cautions must be used for any broken skin. It is most appropriate when combines with soothing anti-inflammatory base herbs. Include Cloves in tincture or tea formulas for chronic acne with tender pimples, acne rosacea, paronychia, and for cracks and fissures about the toes. *Eugenia* may stimulate

saliva flow in cases of dry mouth, or appetite in cases of anorexia.

***Eupatorium perfoliatum* (Aguweed, Boneset, Thoroughwort)** *Eupatorium* is a traditional medicine for muscle complaints associated with viral and bacterial infections, and is specific for aching associated with the flu, thirst, chilliness and nausea associated with the flu. *Eupatorium* is indicated for bone pains, deep aching in the muscles and back, gouty inflammations, and myalgia associated with febrile illnesses. *Eupatorium* is specific for coated tongue and cracks at the corners of the mouth, a yellowish coating on the tongue, unusual thirst with a bitter taste in the mouth, chilliness and nausea, and muscle aches associated with the flu. *Eupatorium* is recommended for weakness and worn-out presentations in aging alcoholics with sluggishness in all organs and organ functions. *Eupatorium* may also help treat skin complaints associated with viral and bacterial infections and has shown activity against a variety of microbes.

***Euphrasia* (Eyebright)** *Euphrasia* is a specific allergy herb, especially for the itchy watery eyes of hayfever. *Euphrasia* may help decongest the ears and sinuses in cases of hayfever, and respiratory allergies. The herb is most specific for inflamed conjunctiva with profuse lachrymation, flushed face, upper respiratory symptoms and skin eruptions associated with viral infections. Use *Euphrasia* for eye symptoms with sneezing, coughing, and respiratory mucus, and stinging and itching sensations in the eyes. *Euphrasia* is also helpful for symptoms of pain, itching, and irritation when due to a virus, contact irritation, or allergic response. The plant is gentle and safe to use long term or acutely and can be a base or specific herb in formulas for allergies. It is available as a tea or tincture. The dry herb can easily be prepared into compresses for eyes or skin, or even prepared into eyedrops or washes.

***Filipendula ulmaris* (Meadowsweet)** *Filipendula* can be used for acute pain and febrile reactivity in the skin, vasculature, and mucous membranes following allergen and toxin exposure. Tinctures of the plant are used for systemic allergic symptoms, and teas for digestive and urinary inflammation and reactivity. The plant has a gentle astringing drying quality. *Filipendula* may also be used for muscle and joint pains associated with inflammation of the intestines, mucous membranes, loose or watery stools. *Filipendula* may be used as an astringent, anti-inflammatory mouthwash in inflammatory conditions of the mucous membranes. *Filipendula* contains salicylates which can help thwart acute inflammation at the onset of strains and acute muscle spasms.

***Foeniculum vulgare* (Fennel)** Fennel is umbell family plant that can be used for digestive support, allergies, and to promote milk production in nursing women. It is safe, high in minerals, gentle in its actions and has a very pleasant flavor making it particularly useful in formulas for children. Fennel is also specific for bowel reactivity, IBS with gas, pain, and cramping, and can be helpful for colic in babies. Tea may be given directly to infants, or to nursing women to pass through the breast milk. Fennel teas, tinctures, and powders are specifically indicated for bloating, peptic distension causing fullness and discomfort, burping and cramping and gurgling in the intestines.

Fennel may also be used orally to reduce allergic tendencies in cases of chronic dermatitis. Fennel seeds or seed powder is also a classic ingredient in eyewash formulas for conjunctivitis and allergic eye symptoms. Fennel is useful base or when GI symptoms accompany allergies. Fennel may be used orally to reduce allergic tendencies in cases of chronic dermatitis. Include Fennel in formulas for dermatitis and chronic inflammation. Fennel essential oil may be used topically to induce photosensitivity as part of a protocol with UV light in cases of psoriasis or vitiligo. Fennel has hormonal effects may help reduce hirsutism with oral use. Fennel is an excellent source of mineral and can be used simply to improve flavor of mouthwashes and pastes.

***Fucus vesiculosus* (Bladderwrack Seaweed, Kelp)** Kelp is a brown seaweed species that has been traditionally used as a food, burned to ashes used for their salty flavor, and used as a traditional medicine including topically for skin and in body wraps to support weight loss, for cancer, inflammation, goiter, and thyroid disease. The term “kelp” is also used to refer to this seaweed, as well as others traditionally used as foods and medicines. *Fucus* is appropriate for dermatitis and dry skin specifically in hypothyroid patients or those with slow metabolic rates and endocrine disruption that contributes to allergic phenomena. *Fucus* is specific for allergic disorders concomitant with obesity, goiter, exophthalmia, constipation, and flatulence. It makes the most sense in allergy formulas as a synergist when hypothyroidism is an underlying contributor. (Dr Stansbury has a larger research paper on this herb available in the ARTICLES tab.)

***Galium aparine* (Cleavers)** *Galium* is emphasized in the folkloric literature for skin cancer, ulcerative lesions, superficial tumors and swollen lymph nodes. *Galium* is also specific for chronic skin conditions and the oral manifestations of scurvy. *Galium* may be used both topically and internally for these complaints. A tea of Cleavers

may help move fluid and help treat tissue stasis, and infections that result from poor circulation, such as diabetic ulcers and poor healing wounds.

***Ganoderma lucidum* (Reishi Mushroom)** The Reishi mushroom's main niche is as an immune modulating herb and has been held in great esteem in China where it has been used as "chi tonic", meaning an agent that can build and nourish basic vitality and life force. Reishi can be used to balance immune function for both immune deficiency, resulting in chronic infections, as well as immune hyperreactivity, resulting in allergic disorders. Consider Reishi as a synergist especially for patients who have numerous low grade allergic and infectious conditions that tend to linger a long time, or for allergic congestion that slowly turns into secondary bacterial infections. Reishi may in infection and inflammation formulas when frequent or lingering infections, fatigue and general malaise accompany. Reishi reduces inflammatory cytokines, normalizes TH1 and TH2 balance in atopic conditions and airway hypersensitivity. Animal models of bronchoalveolar inflammation have shown improvements in cytokine production and reduction in airway reactivity involving an improved Th1 to Th2 balance.⁶¹

***Garcinia cambogia* (Mangosteen)** To stimulate peristalsis in cases of atony, debility, sluggish metabolism.

***Gaultheria procumbens* (Wintergreen)** The essential oil is useful in liniments and topical formulae for pain management protocols. *Gaultheria* is specific for rheumatism, sciatica and neuralgia, but has more anodyne than trophorestorative effects, so is best combined with bone building herbs such as Alfalfa, Nettles, or Gotu Kola.

***Gelsinium sempervirens* (Jessamine)** This highly toxic plant is used in small drop doses for neuralgic pains, burning pains, or the eyes, throat, tongue and ears. To be used by skilled practitioners only, and available by prescription only.

***Gentiana lutea* (Gentian)** Gentian is specific for skin complaints associated with poor digestion, an acidic stomach with ravenous hunger, nausea and sense weight or pain in the stomach, and colicky pain with flatulence and abdominal tenderness. Gentian may be a supportive rather than a primary herb in formulas for skin complaints, and often in a lesser proportion than other herbs in a tincture formula.

***Geranium maculatum* (Cranesbill)** *Geranium* is an astringent herbal useful teas, tinctures and pastes/powders, both topically and internally to reduce bleeding and discharges in the skin and mucous membranes. *Geranium* may be included in formulas for intestinal ulcers, bloody diarrhea due to infectious and inflammatory causes such as ulcerative colitis. *Geranium* in teas and tinctures helps control excessive discharges from mucous membranes. On the skin, *Geranium* is useful topically to dry oozing and weeping lesions such as rhus tox (Poison Oak) poisoning and vesicular excema. *Geranium* may reduce bleeding and discharges in the skin and mucous membranes, when there has been vigorous scratching of lesions, to promote scab formation. It is not strongly anti-allergy but helps drive a formula to have strongly drying effects where needed and is therefore best thought of as a synergist for secretory allergic phenomena.

***Ginkgo biloba* (Maidenhair Tree)** *Ginkgo* is most well-known to enhance circulation, helping to deliver more blood and oxygen to the brain, heart, and limbs. Due to its numerous well known effects on circulation, *Ginkgo* is especially specific for skin lesions due to vascular insufficiency, such as stasis ulcers, or in asthma or dermatitis formulae, for patients who also have hives, high blood pressure, clotting tendencies or other vascular conditions. *Ginkgo* is helpful in formulas for the elderly, heavy smokers, and diabetics when there is insufficient circulation causing heart weakness, shortness of breath, or numbness and tingling in the hands or feet. *Ginkgo* may enhance circulation to the eyes in cases of macular degeneration, diabetic retinopathy, cataracts, spots and floaters, and support failing eyesight associated with poor circulation, or ringing in the ears. For the diabetic retinopathy, nephropathy, neuropathy, *Ginkgo* is used long term and may improve impotence due to diabetes, and chronic gum disease associated with heart disease. *Ginkgo* may improve poor circulation to the bone to help treat bone infections and other serious diseases associated with circulatory insufficiency.

Ginkgo is also a wonderful anti-allergy herb, and often overlooked for its ability to reduce vascular reactivity in cases of asthma, hives, migraines, chronic chemical sensitivity and contact dermatitis, *Ginkgo* is very appropriate as a base herb in allergy formulas. *Ginkgo biloba* is commonly used in combination in China for the management of allergic airway disorders, and its anti-inflammatory and antioxidant properties may improve chronic allergic disorders such as asthma, hayfever, and allergic conditions in the eyes. In addition to the numerous antioxidant and anti-inflammatory actions, *Ginkgo* is also immune supportive and thus useful for both allergic phenomena as well

rhinitis and reactive airway disorder that tend to move into sinus and lung infections. *Ginkgo* has anti-allergy activity through a variety of mechanism including antioxidant activity and inhibition of platelet activating factor. The ginkgolides, a group of terpenes are credited with PAF inhibition. Human clinical trials have shown *Ginkgo* to reduce allergic reactivity in those prone to contact dermatitis. *Ginkgo* extracts have been shown to reduce reactive airway symptoms in asthma suffers in placebo controlled clinical trials. German physicians have report several case studies of *Ginkgo* reducing severe angioedema with acute hypovolemic symptoms.

***Glycyrrhiza glabra* (Licorice)** *Glycyrrhiza* is systemic and all-purpose anti-inflammatory, anti-allergy, and hormone regulating herb with particular affinity for mucous membrane inflammation and ulceration. Licorice has been used since ancient times in Traditional Chinese Medicine, and in ancient Egyptian, Greece and Roman healing traditions. Licorice has many hormonal and metabolic regulatory properties. Licorice has numerous medicinal uses and in China, Licorice has been referred to as “the great harmonizer” due to the belief that it can go everywhere in the body and pull together the actions of other herbs in botanical formulas, and is said to enter all meridians. Licorice seems to deserve this reputation because it can be used for ulcers, allergy, viral infections, fatigue, hepatoprotection, adrenal disorders, infertility and numerous hormonal problems. Several Licorice-based medicines have been introduced including a Japanese glycyrrhizin preparation used clinically as an anti-allergic and anti-hepatitis agent, and a remedy for gastric ulcer marketed in the Netherlands in 1940s. Licorice also has a long-standing reputation as an emergency remedy in China for acute pituitary failure such as post-partum Sheehan’s syndrome.⁶²

Licorice may be included in skin formulas where underlying allergies or atopic tendencies are present, as well as for individuals with poor immune response and tendency to infection, or excessive immune response and autoimmune skin conditions. Include *Glycyrrhiza* in formulas for skin eruptions due to underlying viral infections, as well as in formulas for hives, dermatitis, chronic inflammation of the skin. Licorice as a solid extract is especially indicated for oral application in cases of oral ulceration, oral lichen planus, oral manifestations of lupus, erythema multiforme, ulcers, canker sores or other lesions of the oral mucosa. Licorice solid extract can be formulated into a variety of gels, sprays, and lozenges helping the medicine to adhere to the oral mucosa. *Glycyrrhiza* may also be valuable in cases of hirsutism due to hormonal imbalances, such as Polycystic ovarian syndrome, further discussed below. Licorice is indicated for muscle weakness associated with long term stress and adrenal fatigue. (Dr Stansbury has written a larger research paper on Licorice available in our ARTICLES tab.)

***Grifola frondosa* (Mushroom)** This medicinal mushroom has immunostimulant and antiviral properties and is used as a supportive measure for repeated infectious illness, and chronic illness such hepatitis, pneumonia, and to support convalescence and recovery. *Grifola* is also used as an immune modulating herb triggered by immune stress or an underlying viral infection.

***Grindelia* (Gumweed)** *Grindelia* is a hot gummy herb most used indicated as an antidote to poison oak and ivy. *Grindelia* is also specific topically for burns, blister, herpetic eruptions, vesicular and papular eruptions with itching and burning, for chronic indolent skin ulcers surrounded by purplish discoloration.

***Guaicum* ()** for a stiff and dry sensation accompanied by burning and dysphagia.

***Gymnema sylvestre* ()** *Gymnema* is specific for type I diabetes where it may increase the production and release of insulin from pancreatic Beta cells. *Gymnema* is included in formulas or taken in capsules as a supportive measure in long term systemic formulas where diabetes, especially Type I is associated with microvascular disease and chronic gingivitis and oral fungal infections. Include in formulas for chronic fungal infections and skin complaints in those with blood sugar imbalances. Include *Gymnema* in formulas for those with skin lesions due to poor circulation such as diabetic ulcers. *Gymnema* may be contraindicated in those with rapid hypoglycemic reactivity, and such individuals with wide swings in blood sugar may be sensitive to *Gymnema* and should start with a low dose and work up in such cases.

***Hamammelis virginiana* (Witch Hazel)** Witch Hazel is mainly a remedy for vascular congestion and is used as a topical and internal anti-inflammatory for the skin, vascular, and mucous membranes. *Hamammelis* is readily available in dry and tincture forms. *Hamammelis* contains astringing tannins, and anti-inflammatory flavonoids including quercetin, useful to astringe infectious discharges, purulence due to irritation, and to treat swollen blood vessels. Witch Hazel is specific for skin trauma and bruising, and to control bleeding in wounds when used as a topical compress. *Hamammelis* may also be used topically to relieve burns and sunburns, for wounds, dilated capillaries, and shaving nicks and injuries. *Hamammelis* is also specific topically for ulcers, hemorrhoids, bruising,

and muscle soreness, and for pelvic congestion associated with poor circulation and profuse discharges. Pain and swelling in contusions, hematomas and wounds can often be allayed by *Hamamelis* soaks.⁶³

Hamamelis also indicated for a burning sensation on the tongue, blisters on the side of the tongue, and thirst. Use as an astringent in formulas for mouthwash and herbal teas for oral inflammation, flabby tongue, and thick slimy saliva. Use *Hamamelis* as an astringent ingredient in eyewash formulas to soothe burning pain and irritation and astringent excess mucus, and for bloodshot eyes with soreness, for eye trauma with intraocular hemorrhage.

Hamamelis is also helpful for vaginal infections and pelvic congestion associated with poor circulation and profuse discharges. Men with varicocele may be treated with a combination of *Hamamelis*, *Gingko* and *Aesculus*. Women with perineal and heavy aching genital pain associated with premenstrual vascular congestion with be treated with a combination of *Hamamelis*, *Chamaelirium*, *Caullophyllum* and/or *Angelica*. Heavy menses due to excessive endometrial build-up, or abnormal shedding as is the case with fibroids and polyps, combine with *Achillea* and *Cinnamon*.

Hamamelis is also specific for hemorrhoids, varicose veins, and vascular congestion in the uterus and pelvis. *Hamamelis* would make a good synergist in topical preparation for allergic conditions that are moist, suppurative and swollen. For pelvic congestion associated with poor circulation, *Hamamelis* may improve the sensation of heaviness and aching in the legs. Similarly, *Hamamelis* may improve muscle pain and swelling are related to vascular congestion. *Hamamelis* is specific or tired feelings in arms and legs, soreness in the muscles and joints, chilliness in the back and hips that radiates down the legs, neuralgia and sciatica in the legs, and for pelvic congestion associated with poor circulation and profuse discharges. *Hamamelis* is a traditional folkloric remedy for hemorrhoids and venous engorgement, easy profuse bleeding, and soreness of the anus.

Harpagophytum (Devil's Claw) An all purpose musculoskeletal anti-inflammatory for arthritis, auto-immune related joint pain, bursitis and tendonitis, and pain management formulae.

Hedeoma pelugium (Pennyroyal) is effective against head lice and the essential oil can be used topically and cautiously for skin parasites and scabies, and as an ingredient in herbal flea, tick, and mosquito repellants. Like all essential oils, Pennyroyal oil must be kept out of the eyes and is not to be used internally, especially during pregnancy. The essential oil may also antidote poison oak and ivy, and may be included in natural mosquito and tick sprays due to repellent effects. Pennyroyal is specific in the folklore for pain in the thumb joints, for pain, coldness, twitching and soreness in the muscles, and for soreness and a sprained sensation in the Achilles tendons.

Hippophae rhamnoides (Sea Buckthorn) This plant is available is a pressed oil, or occasionally as berry syrups, powders, and liquiers. The orange oil of the Sea Buckthorn may be used topically on skin inflammation and lesions, as well as taken internally like other essential fatty acid plants to reduce allergic and inflammatory processes. *Hippophae* may improve skin and wound healing in those prone to scars and keloids. Oral ingestion of the oil is noted to improve fatty acid composition of the skin in patients with atopic dermatitis. Sea Buckthorn has been noted to speed wound healing⁶⁴ and have significant antioxidant activity,⁶⁵ and offer UV light protection.⁶⁶ A partial explanation for the significant wound healing effects of Sea Buckthorn is the rich nutrient content including Vitamins A, C, and E and the minerals sulfur, selenium, zinc, and copper. Hydroxyproline, an important basic building component of bone, cartilage, and the skin's connective tissue matrix, has been shown to increase with the topical application of Sea Buckthorn oil. Hexosamine, glutathione, Vitamin C, and catalase are also all noted to increase in the skin following topical use.⁶⁷ Sea Buckthorn is also being reported to have an anti-cancer effect.⁶⁸ Oral ingestion of the oil is noted to improve fatty acid composition of the skin in patients with atopic dermatitis.⁶⁹ Sea buckthorn is prepared into an oil and may be a base emollient ingredient for topical use on cheilosis, labial lesions, and in oral pastes crafted to allay pain or moisten atrophic, dry mucosal tissues.

Humulus lupulus (Hops) Hops flowers, technical known as strobiles contain a bitter resin, lupulin credited with sedative effects due to promoting parasympathetic nervous system activity. Hops stables are used in the brewing of beer and contribute to the sedative effects. Hops also contain traces of estrogen, rare in plants, including estriol and estradiol identical to that found in the human body. Hops can offer estrogenic effects in menopausal formulas, and was a traditional Eclectic remedy for genitourinary symptoms in men associated with nocturnal seminal emissions.

Hops is also a digestive bitter and nervine useful in cases of stress, anxiety, and insomnia. Hops is also used as a complementary ingredient in adrenal and stress formulas in those with GERD symptoms, irritability, and poor sleep. Hops is also helpful useful for oral irritation in those with digestive disturbances and *for* digestive ailments in

alcoholics when there is wakefulness, excitability, giddiness, and muscular twitching.

***Hydrastis canadense* (Goldenseal)** Goldenseal excels at astringing mucous membranes and enhancing immune function of mucous membranes.⁷⁰ Goldenseal is used for catarrhal states of the stomach and intestines, and especially when there is a bitter taste in the mouth. Goldenseal clears purulence and “dampness” from swollen mucous membranes, and treats atonic dyspepsia. Older herbal books recommend *Hydrastis* for pulsations in the stomach and an “all gone” feeling. *Hydrastis* has been traditionally included in formulas for gastritis, digestive ulcers, digestive cancer, congested liver with tenderness and jaundice, and for rectal prolapse, anal fissures, prolapse. *Hydrastis* was also said to be specific for sticking pain in the rectum when passing stool that persists for a long time afterward. *Hydrastis* is a broad acting antimicrobial and used for intestinal infections, dysbiosis, traveler’s diarrhea. *Hydrastis* is specific for congested mucous membranes that oversecrete and become a breeding ground for opportunistic infections.

An excellent antimicrobial astringent remedy for mucous membrane congestion, and specific for a flabby swollen tongue with indentation of the teeth on the sides. *Hydrastis* is indicated when there is a foul or a hot peppery taste in the mouth, and for stomatitis and ulcerative lesions in the mouth and on the tongue. *Hydrastis* is used in tinctures, gargles and mouth washes for infectious stomatitis, oral ulcers, and dysbiosis, and can be prepared into eyewash ingredient specifically for thick purulent mucous accumulations.

Hydrastis has also been traditionally used for uterine disorders, including lack of tone, hemorrhage, and metrorrhagia in cases of uterine fibroids and atony. *Hydrastis* may be included in formulas for menopausal bleeding disorders, and used internally as a douche for vaginitis with profuse thick discharge. *Hydrastis* was also used historically as a “Vag Pack” where a *Hydrastis*, Mag Sulphate, *Thuja* essential oil combination was used vaginally many times per week for several months in the treatment of uterine fibroids, polyps, cervical and vaginal ulcerations, lesions such as warts and vegetative growths, and chronic vaginal infections.

Hydrastis is also specific topically and locally for the chronic fungal infections seen in diabetics. Orally for intestinal dysbiosis seen in diabetes and/or chronic urinary, skin and vaginal infections. Use *Hydrastis* topically for bacterial and fungal infections of the skin, and for skin cancers and ulcers. *Hydrastis* may also be used as a mouthwash for oral manifestations of Lupus or systemic diseases. *Hydrastis* is specific for hyperhydrosis and unhealthy skin, especially when catarrhal states of the stomach and intestine accompany.

***Hypericum perforatum* (St Johnswort)** St Johnswort is most well-known for its effects on the nervous system, and for treating anxiety and depression in the modern era. Much research has focused on St Johnswort’s neurotransmitter effects including beneficial effects on serotonin, dopamine, and GABA, as well as enzymes that synthesize and metabolize them. St Johnswort is useful in as a synergist in formulas for menopause and adrenal dysfunction associated with anxiety, and in formulas for GI pain, vascular engorgement, inflammation associated with anxiety and nervous disorders.

Before St Johnswort was popularized for anxiety and mood disorders, it was most well-known historically to treat strains, sprains, bruising, hematomas, and musculoskeletal and nerve trauma. St Johnswort is specific for the neuralgic pains of herpes infections, such as cold sores, shingles, and genital herpes, and herpes ophthalmia because of its antiviral, neural anti-inflammatory, and anodyne properties. There are few better remedies than St Johnswort for shooting lancinating pains with herpes infections, nerve trauma, and neuronal inflammation. St Johnswort may also be used as an ingredient in formulas for other types of acute viruses when there are aching muscles and eye irritation. Because of an affinity for highly innervated areas, *Hypericum* is indicated to treat retinopathy, retinitis, ocular nerve disorders, for head trauma and traumatic injuries to the eyes. St Johnswort is also useful topically following dental extractions and oral surgery to reduce swelling, speed healing, and allay pain, where it may be combined with Myrrh tincture and clove essential oil on a gauze pad and placed directly against the tooth socket. *Hypericum* is specifically indicated for sensations of numbness, tingling and burning. *Hypericum* is also a useful connective tissue tonic for microvascular fragility seen in chronic gingivitis and erythema multiformae. St Johnswort should also be considered for the polyneuropathies seen in diabetics, and for irritable bladder and bladder weakness seen with diabetes and post-menopausally, and may help bedwetting in children when due to irritation and hypersensitivity of the bladder lining. Some old herbals suggest efficacy using St Johnswort for breast pain, especially when there is a stinging or burning sensation.

Hypericum also helps the blood vessels, both large and small, and can be used orally and topically for skin complaints associated with vascular inflammation such as rosacea and telangiectasia. *Hypericum* owes its brilliant red color to a rich content of flavanols including hypericin and hypericin. Flavonols work together with Vitamin C to link connective tissue fibers, such as collagen and elastin, making them stronger, and better able to heal or resist injury. *Hypericum* may help protect and restore connective tissue and the fixed oil may be used topically to prevent

stretch marks during pregnancy and to promote healing in the skin and joints, and internally as a connective tissue tonic for vascular fragility, chronic hemorrhoids, and easy bruising. *Hypericum* is specific for bruising, strains, sprains and soft tissue injuries, and for injury to highly innervated areas such as fingers and toes. *Hypericum* is also specific for puncture wounds and nailbed injuries, and skin lesions and trauma associated with neuralgia and shooting, lancinating pain such as reflex sympathetic dystrophy, and sciatica. *Hypericum* may also help hyperhidrosis and sweating of the scalp while sleeping. *Hypericum* is also specific for loss of head hair following head trauma and scalp injuries, and is specific for excema of the hands and face with intense itching. *Hypericum* is also indicated for sensitive ulcers and sores in the mouth although the author has seen one case where *Hypericum* caused these symptoms. Include *Hypericum* in formula for warts due to anti-viral activity, or skin eruptions due to underlying viral infections.

***Iris versicolor* (Wild Iris)** As Iris is a warming stimulating herb, small doses of only a few drops combined with other herbs are needed to gently stimulate the glands. Iris is used in small amounts to stimulate atonic bowels and sluggish bowel function, or to decongest the thyroid in cases of hypothyroid goiter. Wild Iris is an overall stimulant specific for congested lymphatic tissues and body glands – lymph nodes, spleen, liver, and thyroid. In general, *Iris* is only available as a tincture, and as a warming stimulating herb, small doses of only a few drops combined with other herbs are needed to gently stimulate the glands. Iris increases the secretions of salivary and digestive glands useful as a complementary herb in cases of hypothyroid digestive insufficiency, poor digestive liver and digestive function, and fat intolerance with steatorrhea. Iris is indicated for loose watery stools that cause anal irritation, as well as greenish stools, nausea and diarrhea, sick headaches, and for headaches with blurred vision and eye pain. *Iris* may be used as a secretory stimulant in cases of dry eyes, and may increase saliva flow in cases of dry mouth, particularly when liver and digestive deficiency accompanies. In thyroid disorders, *Iris* may be included formulas for goiter or simply mild soft enlargements of the thyroid gland. It may also reduce congestion in the tissues that may lead to exophthalmos in hyperthyroidism.

***Juglans cinera, nigra, regia* (Black Walnut)** Black Walnut is mainly a remedy for digestive and liver insufficiency with jaundice, intestinal parasites, headaches, and tissue congestion. *Juglans* is easy to find as whole dried walnut hulls, powder, and commercial tinctures, and is a common ingredient in encapsulated products formulated for intestinal parasites. Black Walnut is also indicated for acne, comedones, and skin eruptions associated with digestive upset. *Juglans* is specifically indicated for seborrheic dermatitis with crusts behind the ears, and for itching papular and pustular eruptions. *Juglans* is also very useful in formulas where boils and abscesses occur in the axillae. Dried walnut hulls also have strong antifungal activity useful tinea, athlete's foot soaks, to include in ringworm ointments, and in formulas for other parasitic infections of the skin such as scabies. *Juglans* is also indicated when there is a dry acrid feeling in the throat and mouth, and tonsil soreness that is experienced as a sensation coming from the external neck and throat, rather from the inner throat.

***Juniperis communis* (Juniper Berry)** urinary stimulant and possible irritant, for cases of atony in the renal system, elderly men with poor urinary tone and function. Specific for thick urine with mucous threads and secretions. Contraindicated from acute inflammatory disorders of the urinary system. Small doses only, and best used in cold, under-functioning, atonic conditions such as diabetics with poor circulation, atony of the tissues and a tendency to chronic urinary tract infections. Best used as complementary herb in formulas containing other nourishing, circulatory enhancing effects for the renal system. Also specific for women who begin to suffer from acute painful UTIs and urinary symptoms around menopause, as declining estrogen levels fail to maintain the urinary mucosa. Use a small amount of *Juniperus* along with *Vaccinium* species (Blueberry and Cranberry), *Angelica*, Licorice and/or *Panax*.

***Khella* (Ammi visnaga)** Ammi visnaga may be used orally to reduce allergic and inflammatory phenomena, including excema and asthma. Ammi visnaga can reduce inflammation and reactivity in the lungs and urinary system, and relax bronchospasm, urinary spasm and retention, and renal colic. Teas may be consumed or hot compresses may be applied over the lungs to treat wheezing and asthmatic tightness, and over the low back in the case of urinary pain, including the excruciating pain of passing a kidney stone. Include Ammi visnaga in tinctures for those with asthma and chronic urinary allergic and spastic reactivity, and as a nourishing base in allergy formulas or as a specific for asthmatic wheezing and renal colic. *Ammi visnaga* may be photosensitizing, and used topically to as a therapy for pompholyx and psoriasis, where the skin is exposed to UV radiation following application. Ammi may be used topically in combination with UV light to stimulate melanin production in cases of vitiligo.

Lavendula (Lavender) The lovely aroma Lavendar flowers has been used historically to scent linens, and even the word lavender relates to the latin root Laver, meaning to wash. Lavendar aroma has a calming and sedating effect, and some modern studies show the plant to affect the limbic system in the brain. Lavendar oil is available in pills for oral use, but even inhaling the vapors of the concentrated essential oil has a gently sedating effect.

Lavendar essential oil can also be used for infections and to allay the pain of sunburns and simple burns. Lavendar essential oil is one of the better tolerated essential oils and can often be used undiluted, directly on the skin in cases of scabies, lice, bed bugs, and other parasitic and infectious complaints of the skin. Lavendar essential oil is easy to pack in a first aid or emergency kit, and can be diluted with water in a spray bottle to use on burn itchy skin. The calming effect of lavender aroma also the calm nerves or burn patients or children restless from bug bites

Leonurus cardiaca (Motherwort) The Latin genus *Leonurus* relates to Leo, the lion, as some of the folkloric indications for the plant contend that it can make one have the heart of a lion. The species name, *cardiaca*, also hints at the long-standing association of *Leonurus* plant for the heart. *Leonurus* is specific for anxiety, restlessness and heart palpitations with menopause or endocrine imbalances. *Leonurus* may also improve thyroid disorders manifesting at the climacteric, or mixed endocrine disorders accompanied by restlessness, anxiety, fatigue, or exhaustion, and some modern clinicians have commented that the plant is good for worn out mothers. *Leonurus* is also indicated for nervous debility and restlessness, for tics, twitches, tremors, and for cardiac excitability and irregularity. For amenorrhea occurring as part of a larger endocrine disorder, such as Polycystic Ovarian disease, *Leonurus* can be one component of a broader formula, such as combined with *Vitex*, *Serenoa*, and Licorice for amenorrhea and infertility. *Leonurus* is also said to be specific for pelvic, lumbar, and bearing down pains.

Leonurus cardiaca may affect mood and act as a nervine via dopamine activity, and help reduce excess TSH via a dopamine mechanism. *Leonurus* may also have neuroendocrine effects, via dopamine as well as numerous vascular effects. Because both the uterine muscle and the smooth muscle cells of the vasculature possess Beta receptors, plant-based “Beta Blockers” like *Leonurus* may be appropriate for both the tonifying the uterus and reducing vasoconstriction in cases of hypertension.^{71, 72, 73, 74} In addition to simply relaxing uterine cramps, *Leonurus* has been reported to inhibit the growth of uterine fibroids in mice, presumably due to other endocrine effects that may reduce hyperestrogenism. Researchers attempted to isolate the constituent responsible for the anti-neoplastic and anti-fibroid effects in mice, but found the synergistic action of the all the components to be most effective.⁷⁵

Lepidium meyenii (Maca) Maca is a small turnip-like tap root, in the same family as turnips and rutabagas cultivated exclusively at high elevations in the Andes. People of the Andes believe the plant to improve stamina at high altitudes, heart function, fertility and libido, and the powdered root is often stirred into juices, porridge, and baked goods, as well as offered to Andean new-comers to combat altitude sickness. Maca may help metabolize hormones due to its diindolemethane (DIM) content, like other cruciferous vegetables, as well as has been researched to have a variety of cardiovascular benefits. Maca may improve breast pain when squeezing or lancinating in quality, and also be helpful for menorrhagia.

Linum ussitatissimum (Flax seeds, Flax Seed Oil) Flax seeds and flax seed meal can be used in baking or smoothies to provide fiber, lignans, nutrients, and traces of essential fatty acids. Flax seeds can also be processed to yield a high quality source of the essential fatty acids (EFAs) linoleic and linolenic acid, vital to hormone balance, immune function, and general health. EFAs are credited with numerous anti-inflammatory and anti-cancer effects, and a great deal of research has elucidated the chemistry.

Lobelia inflata (Pukeweed) *Lobelia inflata* is one of some 400 *Lobelia* species, and is used medicinally and also goes by the common name Indian Tobacco or occasionally “Pukeweed” because of the powerful emetic effect of the fresh buds. *Lobelia* is most indicated in lower respiratory airway reactivity where it has classic and reliable bronchodilating effects due to direct adrenergic effects on bronchial smooth muscle. The plant is potentially nauseating and is therefore usually reserved for acute and short term use. *Lobelia* may be an important specific ingredient in formulas to open the airways for acute wheezing and give patients and effect tool for reducing the use of steroidal inhalers. It is more of a muscle relaxer than an anti-allergy herb and would not be effective as a nourishing base herb in asthma formulas or an herb that can really reduce allergic phenomena in the first place. *Lobelia* make a good kicker herb in formulas and protocols for acute asthmatic wheezing.

Lobelia may also be prepared as an infusion for use in compresses for rhus poisoning, insect bites and stings, and to allay the pain of bruises and strains. Folkloric literature also suggests it topically to allay the pain of erysipelous. *Lobelia* is readily available in dry and tincture forms. *Lobelia* has also been used topically for failure of the cervix to dilate during labor, rigid os, for perineal and vaginal rigidity with labor. To avoid nausea, *Lobelia* is used

topically in these conditions, or as an enema to elicit reflexive relaxation of the uterus and vaginal tissue.

Diluted and drop dosages of *Lobelia* may reduce excessive salivation, while larger dosages of tincture can promote saliva and digestive secretions. *Lobelia* is specific for a metallic taste in the mouth, a burning sensation, and tenacious mucous in the throat. Use small drop dosages for excessive salivation and nausea due to morning sickness, and for rapid onset of nausea and salivation after smelling tobacco or other offensive odor. (See our ARTICLES tab for more extensive research and information on *Lobelia*.)

Lomatium (Desert Parsely) *Lomatium* is an anti-viral herb to include in lung formulas for cough, bronchitis, and Other respiratory infections. *Lomatium* may also be included in anti-viral formulas for treating chronic warts. Essential oil or other *Lomatium* concentrates may be used topically to induce photosensitivity and used with UV light therapy as part of a protocol for psoriasis and vitiligo.

Lycopodium clavatum (Club Moss) *Lycopodium* is mainly a homeopathic remedy for conditions of weakness, atony, emaciation, and senility, but *Lycopodium* is also specific for tooth pain with decay, tooth pain that is better with warm applications, for dryness of the mouth without thirst, for fissures or blisters on the tongue and for halitosis. *Lycopodium* is also indicated for ulcers of the tonsils, deposits in the back of the throat including diphtherial membrane formation, and laryngitis associated with ulceration or destruction of the larynx and vocal cords. *Lycopodium* is not commonly available on the market place except in homeopathic form.

Lycopus virginicus (Bugleweed) Specific for vascular excitation due to sympathetic (adrenergic) stimulation with rapid pulse. For thyroid disorders, *Lycopus* is specific for tumultuous heart action, and is occasionally helpful in exophthalmic goiter. *Lycopus* is also used for toothache in molars, especially when worse with vascular congestion.

Mahonia/Berberis (Oregon Grape) Oregon Grape roots are an important folkloric alterative herb, traditionally used to treat liver congestion and slow digestion, intestinal dysbiosis, skin eruptions due to poor liver and digestive health, coated tongue, and dyspepsia due to poor digestion. It is used in teas, tinctures, powders, and encapsulations. *Mahonia* is useful in eyewashes for thick purulent mucous accumulation in conjunctivitis. An alkaloid found in the plant, berberine, is found to improve the liver's processing of fats, cholesterol, sugar and carbohydrates, and may therefore be used to treat diabetes, hyperlipidemia, obesity, and is included in weight loss and detoxification protocols. Oregon grape root or berberine supplements may reduce recurrent infections in diabetics, and chronic minor infections associated with a toxic state in the body. Oregon Grape is specific for enlarged liver, chronic skin diseases, and is a useful peptic bitter for atonic dyspepsia, specific when there is a coated tongue and chronic catarrh. Oregon Grape is also indicated for weakness and emaciation from chronic disease, digestive derangements, malnutrition.

Oregon Grape is also useful to improve the liver's processing of hormones, and can improve estrogen dominance or unopposed estrogen. Oregon Grape root power can also be prepared into a vaginal douche and is especially indicated for thick mucous-like vaginal secretions, and may also improve vaginal pain, dyspareunia, and loss of libido in women.

Oregon Grape is useful topically as an antimicrobial for skin, eye, and mucous membrane infections. Antibiotic resistant staph infections of the skin. Use *Mahonia* topically on infected wounds or infectious complaints of the skin. *Mahonia* is specific for scaly excema, acne, boils, blotches, skin eruptions, pimples and general poor complexion and dry rough skin. *Mahonia* is useful topically as an antimicrobial for skin, eye, and mucous membrane infections.

Oregon Grape root is also useful in formulas to treat rheumatic pains, especially in shoulders, arms, and hands, and for swelling of the finger joints. For stitching pains in the feet when standing, chronic heel pain, for pain in balls of the feet with every step, where there is easy fatigue with walking short distances.

Malaleuca (Tea Tree) Tea tree is most commonly used in the form of essential oil, and used topically for skin infections, scabies, lice, fungal infections, infected wounds. Tea tree oil soaps, wound salves, anti-fungal ointments, and acne washes are all readily available on the market. Tea tree essential oil can also be kept on hand for custom foot soaks, skin washes, minor surgery kits etc. Tea Tree oil formulas may be considered in topical applications for osteomyelitis and infectious arthritis and bursitis, especially when combined with castor oil and MSM or DMSO.

Matricaria recutita (Chamomile, German Chamomile) Chamomile is an excellent digestive antispasmodic, carminative, and anti-inflammatory agent, helpful for including in teas for Irritable Bowel Syndrome, colitis, diarrhea, painful gas and bloating, loose stools, nausea and vomiting. Chamomile flowers are credited with anti-

inflammatory and wound healing actions.⁷⁶ Chamomile also has nervine properties and useful to allay anxiety, and is gentle enough to use in children or those on prescription medications. Chamomile is indicated for digestive symptoms due to emotional upsets, dyspepsia with stomach pain and pressure, burping, and flatulent colic, GERD and burping with bitter, or foul taste, and digestive and emotional symptoms that are worse coffee. Chamomile is traditional for babies and toddlers with green watery stools, or when sweating accompanies digestive symptoms. Chamomile is often used as a gentle and well-tolerated nervine agent, specific for those who are nervous, restless, irritable, apprehensive, and hypersensitive to pain.

Chamomile can also be used internally and topically as an anti-inflammatory agent for dermatitis, diaper rash, and nervous irritation. *Matricaria* tea can be used as for skin washes and compresses, and large quantities of for baths, or kitchen sink soaks for babies. Consider *Matricaria* as a supportive herb for when emotional and digestive upsets accompany skin complaints. Although it is antiinflammatory topically and when consumed orally, because the dried flowers harbor pollen that may become airborne when handling the dry plant, some allergic individuals could experience itchy eyes or hayfever-like symptoms. Chamomile may be included in formulas for teething in infants and toddlers, and in mouthwashes for toothaches that are worse from hot food and liquids.

Chamomile is also helpful for premenstrual and anxiety and irritability, diarrhea and intestinal upset with menses, menstrual cramps and dysmenorrhea with sense of weight in the pelvis, amenorrhea, and breast enlargement of newborns, especially when combined with *Phytolacca*.

***Medicago sativa* (Alfalfa, Lucerne)** Alfalfa is a mineral tonic herb with many nutritious constituents including trace amounts of Vitamins D and K, somewhat rare in plants. The plant also contains hormonally active isoflavones and steroidal saponins that may be hormonally active by binding to estrogen receptors in tissues. Consumption of the plant sterols may also lower cholesterol.

Alfalfa is valuable as a mineral and nutritional tonic in cases of malnutrition, osteopenia of the jaw, and weak or cracked teeth, in cases of poor healing wounds, weak fingernails and connective tissue and osteopenia and osteoporosis. *Medicago* isoflavones may improve bone mineral density when taken daily, longterm. Use alfalfa leaves in mineral tonic teas and capsules to support the connective tissue, in powders in medicinal foods, or with long soaked in vinegar or lemon juice to extract the most minerals. The steroidal saponins may support postmenopausal skin and connective tissue laxity, and may improve vitiligo due to genistein content and promotion of melanin synthesis.

***Melissa officinalis* (Lemon Balm)** Sometimes called “the gladdening herb”, the lemony smell of Lemon Balm is credited with the ability to improve the mood, and treat anxiety and depression. Modern research suggests that the plant promotes dopamine in the brain, serving to stabilize the mood, and regulate pituitary hormones. Lemon Balm is specifically indicated for depression and anxiety in those with endocrine imbalances, including thyroid and female hormonal disorders. Lemon Balm may also be included in formulas for muscle pain due to stress and emotional upset, or viruses. Lemon Balm has antiviral effects against herpes and other viruses, and the essential oil is particularly useful topically on herpetic lesions. Lemon balm may be included in various immune formulas as a support ingredient to treat colds, flu, and respiratory infections.

***Mentha piperita* (Peppermint, Mint)** Mint has numerous medicinal uses and is sometimes included in tea blends simply for its appealing and refreshing flavor. Mint tea is especially useful as a digestive aid to treat nausea and bloating, colic in infants, digestive upset with a large amount of painful gas, burping, rumbling, and flatulence. Enteric coated pills containing mint essential oil are also available, and are known to make it through the stomach acid and enter the large intestine, ideal for treating bowel spasms and pain. This treatment is also shown to make colonoscopies more tolerable and comfortable.

Mint essential oil may be used topically to allay itching in cases of hives, chicken pox, mosquito bites and other pruritic skin conditions. The diluted essential oil can be used as a douche for vaginal itching and genital itching such as jock itch and rectal inflammation and pain. Undiluted oil, although intense, can blunt acute hemorrhoidal pain. Mint teas and tinctures can also be taken internally and locally for herpes zoster and chronic itching of the skin. The essential oil or tincture is very helpful to allay oral and dental pain, to provide a cooling effect for burning sensations. *Mentha* is also specific for a dry and a sticking sensation of the throat and to clear mucous from the throat.

***Mentha spicata* (Spearmint)** Spearmint has many of the same properties as peppermint, above. Spearmint is useful to treat nausea and bloating, colic in infants, digestive upset with a large amount of painful gas, burping, rumbling, and flatulence. Recent research has shown spearmint to inhibit the synthesis of dihydrotestosterone and thereby

benefit women with elevated androgens, such as those with PCOS with the consumption of several cups of tea per day. However, such animal studies have also shown that regular consumption may male animals may have damaging effects on the testes.

***Mitchella repens* (Partridge Berry)** *Mitchella* is a somewhat uncommon herb, used traditionally as a uterine tonic. Traditional formulas have included *Mitchella* as a “partus preparator”, meaning a uterine tonic to be used in the last trimester of pregnancy to prepare for parturition/delivery. *Mitchella* is especially for women who have had many children, where the use of *Mitchella* can improve the muscular tone. One such classic partus preparator is the “Mother’s Cordial” used by eclectic physicians of the late 1800w, the historical recipe being equal parts *Mitchella*, *Helonius*, *Viburnum*, and *Caulophyllum* in brandy with sugar and essence of *Sassafras*.

***Momordica charantia* (Bitter Melon)** Bitter Melon, or *Mormordica* is a tropical curcubit, or cucumber relative, most well known for its ability to promote insulin and help balance blood sugar. *Mormordica* has been used traditionally in India as a Type I diabetes remedy, and limited animal research suggests that it may even increase the production of insulin by pancreatic Beta cells.

Momordica is a natural source of organic fluoride, making it a candidate for gingivitis and tooth decay formulas related to diabetes. It is also considered to be a digestive bitter, enhancing digestion and supporting carbohydrate metabolism.

***Monarda* (Bergamot, Bee Balm)** Bergamot is an aromatic plant of the mint family, whose leaves have long been used to flavor traditional Earl Grey tea blends. The essential oil of Bergamot may be used with caution topically to induce photosensitivity as part of a protocol for psoriasis or vitiligo. *Monarda* tincture may help chronic fungal infections of the skin and yeast vaginitis when taken orally for several months.

***Myrica cerifera* (Bayberry)** *Myrica* is primarily a liver remedy indicated for liver inflammation with jaundice, right upper quadrant pain and constant sense of fullness, clay color stool. *Myrica* is also indicated to astringe spongy, swollen bleeding gums, and to clear thick ropy, tenacious mucous in the throat and on the tongue. *Myrica* is specific for abundant mucous and a tight feeling in the throat that compels one to swallow frequently. *Myrica* is used in formulas for chronic sore throats associated with nausea, loss of appetite and long lasting stomach discomfort after eating, bitter taste in the mouth, and halitosis. *Myrica* is indicated for oral congestion and dybiosis related to underlying liver disease and hepatic congestion, where a person may crave or be better with acids. *Myrica* is indicated for biliary insufficiency and for digestive upset, with older herbals mentioning that the plant is specific when there is the urge for stool, but only passing much gas.

***Nepeta cataria* (Catnip)** The *Nepeta* genus is in the mint family and the several hundred species are collectively referred to as the catnips or catmints. Catnip is most well known for its profound effect on the nervous system of cats, but the plant also has calming effects on the human nervous system as well. Catnip has been traditionally used as a general calming agent or nervine to treat sleep disturbance, nervousness and irritability. Catnip tea was at one time a very popular general culinary tea found stocked in a majority of households. Catnip is a gentle and safe remedy traditionally recommended for cranky children and irritability in babies and toddlers. Modern research shows catnip to have antiviral and general antimicrobial effects supporting its historical inclusion in formulas to treat colds and flu, particularly in childrens’ remedies where irritability and poor sleep accompany simple illnesses. Catnip is a diaphoretic, meaning an agent that can raise the core body temperature and promote sweating when taken as a hot tea in a large enough dose. The use of diaphoretics is indicated at the onset of colds and flu when there a sense of chill. *Nepeta* is also a carminative tonic to use in formulas where eye, ear, nose, or throat complaints are due to underlying upper respiratory infections, especially in children where digestive upset and flatulence accompany.

Numerous emotional complaints are remedied by *Nepeta* including restlessness, colic, nervousness and even “insanity” and psychological disturbances. Maude Grieve, author of the still beloved *A Modern Herbal* has written extensively about the plant under the heading of Catnep. She reported the freshly expressed juice was more effective than tea for nervous headaches and as a menstrual regulator, and stated that Catnep should be taken by the tablespoonful at least 3 times a day. She also mentions that hysteria and nightmares may be remedied by catnip.⁷⁷

Several researchers examined the effects of acute and long term administration of *Nepeta* to mice and both scenarios were reported to increase sleeping time.^{78, 79} *Nepeta persica* tincture has displayed an anxiolytic activity in animal models of anxiety.⁸⁰ Although the scientific research on *Nepeta* is very scant, clinical herbalists report Catnip to be a useful herbal tool for reducing stress symptoms and treating anxiety disorders.

Catnip has not yet been widely studied but is known to contain terpene nepetalactone in the volatile oil fraction credited with being detectable and attractive to cats. An old gardener's rhyme states that "If you sow it that cats won't know it, but if you set it the cats will get it". The nervous systems of other animals and insects may also be affected by nepetalactones. Iridoid glycosides are also found in *Nepeta cataria*, including nepetoglucosylester.⁸¹ Iridoid glycosides are also found in *Valeriana* and known to contribute to the sedative effects of this classic anxiety and insomnia plant. Caffeoyl-artronic acid also occurs in *Nepeta*.⁸²

***Ocimum sanctum* (Holy Basil, Tulsi Basil)** Holy Basil is "holy" due to historically recognized effects on the nervous system, that like the burning of frankincense in the Catholic Church, may be used to create sacred space, activate the brain to connect with a higher power, or expand the consciousness in such a way as to help us develop our sacred selves. This species of basil is related to the common culinary basil used to make pesto and spaghetti sauce. In India Holy basil has been used traditionally in spiritual bathing, for water purification and food sanitation, and to prepare disinfectant washes. The plant has also been used for diabetes, digestive pain and spasms, kidney pain and conditions, as a circulatory stimulant, to treat infections, colds, flu, and fever, and topically to treat snake and insect bites, and in wound and eye washes. *Ocimum* might occasionally be include in allergy formulas as a general anti-inflammatory and nerve, to help wean from steroids, and to provide adrenal support in steroid-induced down regulation. *Ocimum sanctum* is also a fairly powerful anti-inflammatory including cycooxygenase inhibition.⁸³ *Ocimum sanctum* and Cloves, *Eugenia* both contain high concentrations of the volatile oil Eugenol, noted to be both a powerful antimicrobial and powerful antioxidant. *Ocimum sanctum* also contains apigenin, a compound shared with *Matricaria chamomile* and noted to be a powerful anti-inflammatory. Traditional uses suggest the plant may help to treat esticular pain, vulvar and vaginal pain, breast pain. Holy Basil is also said to be specific for treating urinary difficulties that are due to diabetes.

Holy Basil has caught the attention of modern researchers and is shown to protect organs and tissues against chemical stress, physical stress, and metabolic stress, and helps optimize blood glucose, blood pressure and lipid levels, and psychological stress through positive effects on memory and cognitive function and through its anxiolytic and anti-depressant properties.⁸⁴ Several of the most studied constituent groups in Holy Basil, the ocimumosides and the cerebrosides, display anti-stress effects by normalizing hyperglycemia, plasma corticosterone, plasma creatine kinase, and adrenal hypertrophy.⁸⁵ (Dr Stansbury has written a larger article on Holy Basil, available in our ARTICLES tab)

***Oenothera biennis* (Evening Primrose Oil, EPO)** Evening Primrose flowers open in the evening at sunset, all within half an hour of one another, and are pollinated by nocturnal moths. The tiny seeds are processed for their essential fatty acids including a high linoleic and linolenic content. Essential fatty acids are required in the body to synthesize immune modulating and anti-inflammatory compounds. Therefore, EPO is useful to provide these essential fatty acids and treat a wide variety of immune and inflammatory compounds. EPO is helpful for treating dermatitis, allergies, hormonal imbalances, PMS, and dry skin, amongst other common inflammatory disorders.

Oregano essential oil is also useful topically for all manner of skin infections including bacterial and fungal. Oregano teas, tinctures, and concentrates can be used orally for all types of systemic infections chronic infections. *Origanum* is useful for flatulence and digestive upset and is effective against intestinal parasites, dysbiosis, small intestine bacterial overgrowth (SIBO), and may be included in skin formula where poor intestinal health underlies.

***Origanum vulgare* (Oregano)** Outside of its use as a culinary spice, Oregano is most used medicinally in the form of a concentrated essential oil which is a powerful and broad acting antimicrobial agent. Oregano oil capsules are taken internally to treat bacterial and fungal overgrowth in the intestines, and address food poisoning and traveler's diarrhea. A few drops to milliliters of Oregano oil can be included in mouthwashes, tinctures, gargles, and mouth pastes for infectious stomatitis and gingivitis, for hairy tongue, thrush, strept throat, and poor oral health, especially when related to poor intestinal health. Include Oregano in formulas for flatulence and digestive upset, and for childhood infections with digestive symptoms. Oregano may also be used for musculoskeletal complaints that are secondary to underlying infectious processes.

***Panax ginseng* (Ginseng, Korean or Asian Ginseng)** Ginseng is one of the most studied, cultivated, and beloved herbs of all times, and helped give rise to the concept of an "adaptogen". Adaptogenic herbs work via supporting the adrenal gland and feedback and regulatory loops with the brain. Adaptogens improve stress response and blunt excessive elevation in stress hormones that lead to fatigue, poor concentration, irritability and other anxiety symptoms. Ginseng is indicated for individuals with poor immune response and tendency to infection, or excessive immune response and autoimmune conditions. *Panax* is specific for exhaustion and endocrine imbalances

following long term overwork and stress, and adrenal insufficiency. Infertility, low sperm counts, and low testosterone levels are all common symptoms of adrenal insufficiency, and may be improved by Ginseng over 3-6 months' time. *Panax* is a warming herb best in cold or neutral constitutions as occasionally people with heat symptoms or warm constitutions are bothered by the plant.

Include Ginseng in allergy formulas as a synergist where underlying atopic tendencies are present. Ginseng is specific for a sensation of swelling in the hands where the skin feels tight and impedes clenching the fingers. Consider *Panax* for stiffness in the back with a feeling of heaviness, fatigue, and weakness. Ginseng is also appropriate for various health complaints when related to stress and overwork, and for musculoskeletal complaints associated with fatigue. Consider Ginseng also for diabetic patients, and for failing eyesight in the elderly associated with fatigue and weakness.

***Petasites hybridus* (Butterbur)** is a traditional medicine for pain, inflammation and airway reactivity, also indicated for migraine, allergic rhinitis and musculoskeletal inflammation. The Butterbur plant, *Petasites hybridus* has been used for centuries for all manner of painful and inflammatory conditions. *Petasites* is an excellent allergy and inflammation herb especially appropriate as an ingredient for in asthma formulae due to general and specific antiinflammatory and antihistamine effects. *Petasites* is gentle with slightly cooling and moistening, demulcent qualities. It would make a good synergist or base herb for allergy formulas.

A review of clinical trials on *Petasites* suggest efficacy for allergy and asthma that warrants further investigation.⁸⁶ One clinical trial reported that *Petasites* alleviated symptoms of allergic rhinitis in a manner equal to anti-histamine pharmaceuticals⁸⁷, and another reported equal efficacy compared to fexofenadine.⁸⁸ An asthma trial reported a reduction in both frequency and severity of asthma attacks and improved spirometry readings following 2 months of *Petasites* use.⁸⁹ Researchers have also reported *Petasites* preparations to reduce the occurrence of migraines.⁹⁰

Petasites has been researched and shown to be an anti-inflammatory via numerous mechanisms including cyclooxygenase and inflammatory prostaglandin inhibition.⁹¹ One clinical trial reported that *Petasites* was as effective as antihistamines in reducing the symptoms of allergic rhinitis compared to placebo.⁹² *Petasites hybridus* has a long history of use for both respiratory inflammation and general pain such as migraine headaches. *Petasites* may reduce inappropriate vasoconstriction via a mechanism that involves blocking calcium gated channels in the vasculature.^{93, 94, 95, 96, 97} *Petasites* may also relax bronchoconstriction via activity at muscarinic sites.⁹⁸ In asthma patients, *Petasites* use is observed to reduce eosinophil and blood nitric oxide elevations.⁹⁹ *Petasites* also inhibits cyclooxygenase, an enzyme involved with the synthesis of inflammatory prostaglandins.¹⁰⁰ A Japanese species of *Petasites* is reported to reduce leukotrienes and histamine-induced bronchoconstriction.¹⁰¹ Leukotriene synthesis in eosinophils and neutrophils is inhibited.¹⁰² *Petasites hybridus* may also reduce corticosterone release from the adrenal gland and inhibit cAMP driven enzyme activation, serving to deter contraction of smooth muscles.^{103, 104} Petasin, a sesquiterpene in *Petasites* is believed to be one active constituent responsible for some of these effects.

***Petroselinum crispum* (Parsley)** Parsley is most mentioned for use as a diuretic indicated for renal insufficiency, or sluggish urine flow with fluid retention and swelling in the tissues. Parsley teas and tinctures may help premenstrual fluid retention, and act as an emmenagogue in cases of amenorrhea and dysmenorrhea with scanty flow. Parsley is best as an emmenagogue when amenorrhea is due to low hormonal levels. Parsley preparations may be used a gentle diuretic in diabetics with loss of renal function. Parsley is specific for urinary symptoms with itching and burning, urethral sensations.

***Phytolacca americana* (Pokeroot Pokeweed)** *Phytolacca* is a moving, stimulating, and fluid moving herb with potentially irritating effects if not properly diluted. Its main niche is as a lymph and immune herb, appropriate for tissue and glandular congestion with a tendency to infections. *Phytolacca* is available as an oil and a tincture and is most commonly combined with other more nourishing or restorative base herbs while it is a kicker herb to assist a formula in moving fluid, lymph, and inflammatory cells and tissue congestion.

Phytolacca is also indicated for skin eruptions associated with systemic diseases and hard swollen lymphatic and other glands. *Phytolacca* can remedy chronic boils and skin infections, folliculitis, abscesses for papular and pustular eruptions, dry, itching, sloughing skin, warts and moles. The folkloric and eclectic literature mentions *Phytolacca* for the skin manifestations of syphilis, as an effective topical option for scabies, and internally for indolent leg ulcers

Phytolacca is indicated for a geographic tongue, blisters and lesions in the mouth with bleeding and indentations on the sides of the tongue. *Phytolacca* is one of the best herbal remedies for tonsillitis, quinsy and tonsillar abscess, tonsillar pain and swelling and enlargement of cervical lymph nodes. *Phytolacca* is specific for acute mastitis, breast pain with hard lumpiness and premenstrual breast pain, cystic masses, lymphatic congestion, ovarian neuralgia,

testicular pain and hard swelling of the testes, goiter. *Phytolacca* is valuable for pain in the throat that radiates to the ear, and for throat pain that is worse swallowing. *Phytolacca* is also indicated for eye symptoms associated with infections and lymphatic congestion and enlarged tonsils, as an ingredient in formulas for orbital cellulitis, for chronic eyelid disorders with crusting, discharges and styes. *Phytolacca* is especially indicated when there is lymphatic congestion, constipation in the elderly, those with fluid stagnation, and circulatory weakness, for fluid stasis, tendency to cysts, and a lymphatic constitution.

Phytolacca is indicated for all chronic infections and various complaints that may originate or be triggered by viral or other systemic pathogens. Historic literature mentions *Phytolacca* to be specific for shooting pains in the shoulders with stiffness and difficulty raising the arms, for rheumatic pains that are worse in the morning. *Phytolacca* is also specifically used for changing and shifting pains that are shooting and lancinating in nature and neuralgia in the feet and toes. Due to the herbs' affinity for tissue congestion, *Phytolacca* is also specific for swelling in the feet and lower legs with aching in the heels and relief from elevating the legs.

Picrorrhiza kurroa *Picrorrhiza* is an all purpose allergy herb appropriate for acute itching in the skin and dermatitis. Research has revealed direct anti-histamine effects.

***Pilocarpus jaborandi* (Jaborandi)** Jaborandi is a profound circulatory stimulant that will promote salivary flow and lacrimation when used orally or in eyedrops. The use of *Pilocarpus* as a sialagogue or to promote lacrymation is limited due to its promotion of perspiration and digestive secretions as well. For this reason, *Pilocarpus* is best used locally, and rarely systemically. *Pilocarpus* is specific for deficient glandular secretions and is used botanically to promote secretions, and used homeopathically to allay hyperhidrosis and excessive heat and sweating. Pilocarpine, the chief alkaloid in the plant is available as a prescription drug to treat severe dry eyes, dry mouth and deficient secretions as occurs with Sjogren's syndrome. *Pilocarpus* may be mixed with licorice solid extracts for Sjogren's patients.

***Pimpinella anisum* (Anise)** Anise seeds have a pleasant flavor and will dispell gas a bloating in the intestines, as well as help open the airways in cases of cough and wheezing. Anise seed tea and tincture are also used historically for oral lesions and antimicrobial and anti-inflammatory in cases of stomatitis.

***Pinus species* (Pine)** Pine is most used topically where the tincture or essential oil is included in liniments and other topical preparations for joint pain and stiffness. *Pinus* is indicated for weak ankles, weakness and emaciation in the legs, and for rheumatic complaints occurring in tandem with allergic skin reactivity, and chronic bronchitis and chest congestion. Folkloric literature describes Pine to have an affinity for "scrophulous constitutions". The historical literature also recommends Pine oil muscle rubs to stimulate the muscles and circulation in children with rickets and difficulty walking.

***Piper methysticum* (Kava, Kava Kava)** Kava is most well known for its profound muscle relaxing and anxiolytic effects. Kava teas, tinctures, and capsules are used for acute musculoskeletal spasms. Kava is an excellent choice to use short term in formulas for acute musculoskeletal pain including fibromyalgia and rheumatic complaints characterized by tight spastic muscles. Kava can also be included in formulas where muscle tightness is accompanied by anxiety and mental emotional turmoil. It is likely that *kawain*, a Kava lactone works in a manner similar to cocaine. Kava may have some activity at GABA receptors¹⁰⁵, as well as glycine receptors¹⁰⁶, both provoking a sedative, muscle relaxing effect. Kava has been noted to prevent strychnine-induced convulsions¹⁰⁷, indicating they may have some effects on indolamines or tryptophan and glycine metabolism.

Kava is known to be anesthetic to the oral mucosa and the lactones (or pyrones) have been shown to be responsible¹⁰⁸. Kava's numbing effect on the oral mucosa makes the plant useful in formulas for severe stomatitis, erythema multiformae, and throat pain. Kava is also appropriate in anxiety formulas and to treat pain, restlessness, emotional sensitivity, Kava also excels at relaxing urinary smooth muscle and cause be drug-like herb to provide pain relief when passing a kidney stone or other situations of renal colic. Kava is also indicated for those with difficulty with urine flow and painful micturition, especially when due to sexually transmitted disease and associated with purulent urethral discharges, and for elderly with atony of bladder and nocturnal enuresis. Effects are rapid in onset and rapid to abate thus Piper m. must be dosed frequently for adequate pain relief.

***Piscidia* (Jamaican Dogwood)** *Piscidia* is used mainly for skeletal muscle spasm, but also has anodyne properties and may be included in anodyne formulas when pain causes whole body tension, restlessness, and poor sleep. *Piscidia* is a relaxing nerve tonic useful for stress, tension, pain, and anxiety.

***Podophyllum peltatum* (May Apple)** An extremely caustic, yet painless escharotic agent with anti-viral properties, useful topically on warts, both verrucous and genital condyloma. Dilute the purified resin with tincture of benzoin and apply topically from once a week to every other day depending on the size and location of the wart. For genital lesions, wash off with warm soapy water in about 4 hours. Available by prescription only.

May Apple resin may also be used topically on warts, skin tags and age spots. *Podophyllum* resin is caustic and is usually placed in tincture of benzoin or other gummy substance, to help a small amount cling to a wart or mole without damaging the surrounding tissues. The plant is available by prescription only and can sometimes be difficult to find.

***Populus species* (Cottonwood)** *Populus* is a drying and astringent herb useful for acute pain and febrile reactivity of the joints and respiratory passages. Cottonwood buds contain a large amount of resin that can have expectorating effects on the airways, and contains salicylates helpful for pain, fever, and respiratory inflammation. For allergies, *Populus* would be more of a synergist in formulas, than a primary herb.

Propolis – Propolis is an aromatic gummy and waxy substance made by bees from high resin plant secretions, such as poplar bud resin, and has many antimicrobial properties. Due to its sticky nature can help herbal preparations cling to the throat or tissues. Propolis can also be used to prepare sticky medicines to use topical and allow to dry on the skin acting as an herbal bandage.

***Ptychopetalum olacoides* (Muiria purma)** for male impotence.

***Pueraria mirifica, lobata* (Kudzu)** *Pueraria* contains phytoestrogens explaining the age old use for menopausal symptoms, breast support, bone density, and preventing and even reversing the greying of the hair. (Dr Stansbury has an extensive powerpoint presentation on phytoestrogen research and other medicinal aspects of *Pueraria*, available upon request.)

***Punica granatum* (Pomegranate)** Pomegranate rinds have astringent and anti-inflammatory effects to use in mouthwashes for oral infections and in teas for traveler's diarrhea, dysbiosis, and parasites. The fruits are high in bioflavonoids with anti-oxidant effects and an affinity for the vasculature, offering anti-inflammatory protection for blood vessel lining, the endothelial cells from lipids, toxins, and elevated glucose. An ounce or two of pomegranate juice can be diluted with water, herbal tea, sparkling mineral water and taken each day as a blood vessel tonic.

Pygeum *Pygeum* is an African plant used for the genito-urinary tract, and is specific for prostatic enlargement, urinary retention due to atony of the urinary passages.

***Quercus alba, rubra* (White Oak, Red Oak)** *Quercus* is a drying, astringent herb with some affinity for the digestive mucosa and digestive vasculature. *Quercus* is useful topically to reduce bleeding and discharges in the skin and mucous membranes, and for indolent skin ulcers, flabby spongy tissue with suppuration. *Quercus* is especially specific for portal congestion, hemorrhoids, chronic liver congestion, intestinal atrophy with mucous diarrhea, blood in the stool. *Quercus* is indicated for liver weakness from chronic alcohol ingestion, splenic enlargement related to portal hypertension, dependent fluid accumulation due to hepatic and portal stasis. When skin complaints or doughy skin are accompanied by liver weakness, consider *Quercus* as a supportive herb.

***Rhamnus cathartica* (Cascara)** Cascara is a powerful irritant laxative and is most often used in small amounts to stimulate the bowels when there is a loss of tone, and when normal peristalsis is lacking. Strong irritant laxatives such as Cascara are not to be used when there is suspected fecal impaction or other intestinal blockage. Cascara may also be used as a supportive herb for skin complaints secondary to digestive disorders, constipation and malabsorption. *Cascara* stimulates the bowels and indicated for atrophy of intestinal smooth muscles, and faulty elimination.

***Rheum palmatum* (Turkey Rhubarb)** Turkey Rhubarb is a traditional remedy described in the folklore for babies with teething difficulties, for children who develop diarrhea during dentition, for children who drool and become irritable because of teething, and for crying, whining children who develop a sour odor to sweat. *Rheum* is especially indicated when oral pain and teething are accompanied by colicky digestive pains centered about the umbilicus, when bowel movements passed with much straining, and for those who quickly feel fullness after eating only a small

amount. *Rheum* is also included in formulas for musculoskeletal pains where malabsorption and poor digestion underlie. Rheum is said to be specific for a sour smell to body, especially when accompanied by diarrhea, and for people who are readily hungry but easily becoming overfull after eating only a small amount.

***Rhodiola rosea* (Arctic Rose)** *Rhodiola* is considered an adaptogenic herb, and also has powerfully astringent effects, and mildly stimulating action. *Rhodiola* is indicated for fatigue, muscle weakness, an inability to exert oneself, and mental fatigue. *Rhodiola* may be used to help prevent altitude sickness, to improve stamina and endurance at high altitude, and for athletes in general. *Rhodiola* is used as a supportive herb in a variety of complaints and formulas where there is fatigue and deficiency.

***Rubus idaeus* (Rubus)** Rubus leaves are used as a vascular and circulatory tonic, often emphasized in the folkloric literature as being specific for uterine disorders. *Rubus* is safe to consume throughout pregnancy to support labor and uterine strength, and as a hemostatic in cases of menorrhagia. *Rubus* may also be included in tea and tincture formulae for collagen vascular diseases to reduce vasculitis and protect blood vessels from inflammatory damage and loss of function and elasticity. *Rubus* leaves may be used as an astringent ingredient in mouth wash formulae when vascular and friable tissues are present.

***Rumex acetosella* (Sheep Sorrel)** Sheep Sorrel is a diminutive, juicy, sour-flavored herb, due to a high content of organic acids. Sheep Sorrel is considered to be an alterative agent, used for weak appetite and digestion, and to allay nausea and vomiting. Sheep Sorrel is included in the classic Essiac and Hoxey formulas, both used for cancer.

***Rumex crispus* (Dock, Yellow Dock, Crispy Dock, Curly Dock)** This species and other “docks” are used as alterative agents, and specifically indicated for hypochlorhydria, malabsorption, constipation, digestive insufficiency. Consider *Rumex* when acne, excema, or psoriasis is accompanied by hypochlorhydria, malabsorption, constipation, or digestive insufficiency. *Rumex* is helpful in skin and allergy formulas where alteratives are indicated, and for skin eruptions secondary to digestive insufficiency. *Rumex* is specific for skin eruptions secondary to digestive insufficiency, and specific for hives and itching skin eruptions that are worse undressing or exposure to cold air. *Rumex* may also be included in formula for joint pain and pathology related to poor digestion, liver congestion, and toxemia.

Rumex species are indicated for sore coated tongue, heartburn, hiccups, chronic gastritis, nausea and anorexia, flatulence and abdominal pain, morning diarrhea, and pruritis related to liver and digestive disturbances. *Rumex* species may be included in musculoskeletal formula where liver congestion and poor digestive function contribute to inflammation and chronic joint pain.

***Salix alba* (White Willow)** Willow bark is often used as an example of a plant high in natural aspirin-like compounds, the salicylates, and used for pain, strains, sprains, and trauma, as well as fever, and inflammatory illness. Willow salicylates may offer temporary and palliative relief of joint, traumatic, and arthritic pain. Willow bark may be a supportive synergistic herb topically in cases of hives and itching vesicles and pustules in the skin, and orally as a wash for cancre sores. *Salix* is especially indicated for acute pain, inflammation and febrile reactivity such as with some severe cases of hayfever, and chemical reactivity allergen exposure in allergic individuals that induce acute malaise and feverish reactions. *Salix* is also an intestinal astringent and anti-inflammatory, and febrifuge. It is also appropriate for enduring hiccups following ingestion of food allergens, infectious and for allergic watery diarrhea. *Salix* may be used as an oral astringent and anti-inflammatory in mouthwash and gargle formulas. The topical application of salicylic acid solutions are known to penetrate the skin, loosen keratin, and promote sloughing of superficial epithelia.¹⁰⁹ *Salix* skin washes are available commercially and sometimes prescribed by pharmacists for acne, however often combined with alcohols and strong soaps, which over time may be more inflaming than helpful. Preparation of herbal solutions may be superior and better tolerated.

***Salvia miltiorrhiza* (Dan Shen)** This species of *Salvia* has many beneficial effects on the vasculature and blood cells, reducing inflammation and enhancing organ perfusion. *Salvia miltiorrhiza* reduces inflammation via a variety of mechanisms, particularly those involving blood cells and endothelial adhesion. *Salvia miltiorrhiza* appears to be able to reduce vascular inflammation by preventing endothelial and microcirculatory injury, prevent release of cytokines from mast cells and reduce reactive oxygen species in a variety of inflammatory processes and situations.¹¹⁰ *Salvia miltiorrhiza* can act as a synergist in formulas where gingivitis is associated with heart disease, vascular inflammation, or diabetes. *Salvia miltiorrhiza* may be used orally for hyperpigmentation to reduce formation of melanin pigment. The research on the heart, circulation, renal perfusion and other vascular supportive

mechanisms are extensive.

***Salvia officinalis* (Sage)** Sage is a common herb garden plant and culinary herb with general antimicrobial and anti-inflammatory properties. Sage is also remarkable drying and can be highly effective when used orally for hyperhidrosis, hot flashes, night sweats, and any similar condition to reduce excessive sweating. 2-3 droppers of Sage tincture can be taken daily, increasing to 5 or 6 if needed. Sage is also used as a drying ingredient in formulas for eye complaints with profuse discharges, excessive salivation, and to astringe boggy enlarged tonsils, excess mucous, and phlegm. *Salvia officinalis* is very helpful to include in menopausal formulas to treat excessive sweating, hot flashes, night sweats, and will even dry up milk flow, acting as an anti-galactagogue in cases excessive or inappropriate lactation, or if a new mother is giving up a baby for adoption.

***Sambucus nigra* (Black/Blue Elder)** Both the berries and the dried leaves and flowers are used traditionally as herbal medicines. The berries make excellent jams, syrups, wines, and cordials, used for circulatory and anti-viral remedies, as well as for their excellent flavor and food value. One traditional elder remedy is to consume a small glass of hot wine each evening as a preventative when viral and other infectious epidemics are going around the local community. The leaves and flowers make a delicate tea used to treat colds and flu. Elder flower teas, tinctures, and berry syrups are used as an antiviral ingredient in formulas for eye complaints associated with the flu and upper respiratory viruses. Elder berries are useful as a vascular tonic for diabetics, to improve circulation and protect the vascular from oxidative damage. *Sambucus* can be helpful for skin lesions associated with weeping discharges and crust formation, and for skin lesions where the epidermis splits and separates becoming full, flabby and edematous, as may happen with the viral xanthems of childhood infections. *Sambucus* is indicated in formulas skin and mucosal inflammation associated with viral infections, influenza, and community epidemics. *Sambucus* may treat myalgia when associated with viral and other infectious processes.

***Sanguinaria canadensis* (Bloodroot)** *Sanguinaria* is an extremely hot herb to the point of being outright caustic and is available by prescription only. *Sanguinaria* may be used in small cautious dosages orally for thrush and for lesions and infections of the oral mucosa, oral lichen planus, and oral erythema multiformae when properly diluted with more soothing herbs or simply a sufficient quantity of water. *Sanguinaria* may be used in oral mouth rinses for poor dental and gingival health related to extensive plaque formation. *Sanguinaria* can also be used in a diluted manner to stimulate secretions in cases of dry mouth, for tonsillitis and stomatitis where there is dryness and a sensation of burning. *Sanguinaria* should be used in small amounts only, typically diluted with other herbs to prevent it from having a caustic effect on the tissues. *Sanguinaria* may be effective against tinea and ringworm when applied topically. *Sanguinaria* may be an effective synergist in formulas when digestive symptoms are associated with burning sensations, hot flashes, and vasomotor symptoms. *Sanguinaria* is specifically indicated for flashes of heat associated with a red face, especially the cheeks, with a burning sensations, heat and burning sensations in the palms and soles of the feet, and for red blotchy eruptions that burn and itch. *Sanguinaria* is also a possible antidote for Poison oak and Ivy exposure. *Sanguinaria* is useful in small amounts as a synergist in more complex formulas addressing GI irritation for rheumatic pains. *Sanguinaria* products can burn holes through the dermis and deeper if improperly used. When used topically, professional guidance is essential.

***Schizandra chinensis* (Schizandra)** *Schizandra* is a liver supportive herb to help treat poor digestion, liver congestion, and “toxemia”. The liver supportive and blood moving action makes *Schizandra* useful to include in formulas where intestinal dysbiosis, alcoholism, and general poor health contribute to a wide variety of health issues. The energy of *Schizandra* is warming and most specific for cold constitutions. Include *Schizandra* in formula for stagnant conditions, musculoskeletal and arthritic complaints that are stiff and better with heat. *Schizandra* may be included in pain may relate to poor digestion, liver congestion, and “toxemia”, and may help clear hormones, drugs, poisons from the blood to help treat PMS, hormonal imbalances, and skin lesions.

***Scrophularia nodosa* (Turtlehead)** *Scrophularia* is specific for dermatitis, seborrhea behind the ears, tendency to crusting. And for prickling and itching sensations in the skin. *Scrophularia* could be considered as a synergist in allergic and atopy formulas where digestive complaints accompany along with enlarged glands and lymphatic congestion. *Scrophularia* has additional folkloric indication including breast pain, tumors, and cysts all hinting at lymphatic congestion. It has also been recommended for painful hemorrhoids. *Scrophularia* may be used as a synergist in formulas where digestive complaints have a full congested character and associated with enlarged glands, and for breast pain, tumors, and cysts.

***Scutellaria baicalensis* (Scute)** This species, not to be confused with *Scutellaria lateriflora*, is referred to in China as “Scute”, and is a broad acting an all-purpose systemic anti- anti-inflammatory. Baicalein, a primary *Scutellaria* flavinoid is noted to have anti-inflammatory and anti-allergic activity, as well as induces apoptosis of cancer cell lines.¹¹¹ Baicalein and baicalin inhibit eotaxin production by fibroblasts. *Scutellaria baicalensis* also contains wogonin which has been demonstrated to reduce the release of pro-inflammatory compounds from white blood cells.^{112, 113, 114} Flavonoids from *Scutellaria baicalensis* are noted to have positive effects on prostaglandin pathways in the body via cyclooxygenase inhibition and other mechanisms.¹¹⁵ These actions provide rationale for inclusion in asthma, allergy, and dermatitis formulations. This species of *Scutellaria* inhibits the release of histamine from basophils and mast cells and is used internally to reduce allergic response and atopic skin conditions. Scute may reduce excessive fibroblast activity and fibrin deposition common in collagen vascular and mixed connective tissue inflammatory disorders, and be of use in treating musculoskeletal inflammation and pain. Scute is gentle and non-irritating, and of neutral to cooling energy. It is primarily only available as a tincture.

***Scutellaria lateriflora* (Skullcap)** Skullcap is an all purpose nervous system tonic and calming agent available as a tea and a tincture. Skullcap is used for nervous irritation with fearfulness, for PMS and menopausal difficulties accompanied by anxiety and fear, inability to concentrate, restless sleep and fearful dreams, insomnia due to worry and nervousness, seminal emissions, headaches. Skullcap has been used historically to treat epilepsy, tetanus, and spastic symptoms due to rabies, and in the modern era may be included in musculoskeletal formulae where nervousness or fear underlies or contributes to the symptoms. Skullcap is specific for tics, twitches and restless legs. To include in musculoskeletal pain formulas where restlessness, anxiety, and pain insomnia accompany.

***Selenicereus grandifloras* (Night Blooming Cactus)** *Cereus* (also classified as *Selenicereus* and *Cactus grandifloras*) is a folkloric medicine used as a heart tonic including blood pressure regulation and the management of the symptoms of congestive heart failure.^{116, 117} Night Blooming Cactus is specific for weak, irregular heart action, aortic regurgitation, and angina, especially when associated with depression and lethargy. The early American folkloric notion was that Night Blooming Cactus was a restorative remedy for the heart capable in improve function via nutritional and tonic effects.

The amines in Night Blooming Cactus are credited with cardiogenic effects. The amino acid tyramine is found in the plant and credited with a positive inotropic action.¹¹⁸ There are no investigations published regarding the use of Night Blooming cactus in pregnancy or lactation. The plant is considered safe when used in small doses in the traditional manner or using 1-10 drops of Night Blooming Cactus was used in the early American herbal tradition.

***Serenoa repens* (Saw Palmetto)** Saw Palmetto is most well known and studied for treating prostatic hypertrophy with painful or difficult urination and dribbling of urine. Saw Palmetto is also used for Polycystic ovarian syndrome (PCOS), elevated testosterone in women, undeveloped or atrophy of the testes, ovaries and mammary glands, loss of libido in both men and women, gonadal pain and inflammation including oophoritis, oophoralgia, orchitis, epididymitis. *Serenoa repens* is also useful in formulas for female hirsutism to help reduce excessive testosterone, and to restore regular menses in women with amenorrhea.

***Silybum marianum* (Milk Thistle)** Milk Thistle is helpful for all matter of hepatic and biliary disorders and associated jaundice and digestive difficulty. Milk Thistle is indicated for infectious or auto-inflammatory ailments of the digestive organs – liver, gallbladder, pancreas, spleen, and kidneys. Milk Thistle also improves altered blood composition due to faulty digestion. The seeds and seed preparations help clear drugs and toxins from the system. Long standing folkloric indications report the herb to be specifically indicated for liver pain, jaundice, portal congestion, liver problems due to chronic alcohol abuse, gastric ulcers, varicosities due to portal congestion, rectal prolapse, fluid retention and dependant edema due to liver disease, stools yellowish or clay-like and passed with difficulty, nausea and bitter taste in the mouth, coated tongue, nausea, retching, vomiting of green acid fluid, swollen enlarged gallbladder. *Silybum* can help clear drugs and toxins from the system in cases of skin eruptions due to drug side affects, and to protect the liver when using Retin A. *Silybum* may also be a supportive ingredient in formulas where chronic eye complaints occur concomitantly with liver congestion and digestive organ inflammation or difficulty. Milk Thistle may also improve musculoskeletal complaints associated with digestive and biliary disorders, and may improve minor muscle stiffness related to liver toxicity and clear portal congestion that may be a cause of aching and pain in the legs. Research has shown to seedsto reduce allergic processes in the skin including mast cell infiltration, and cytokine and immune globulin release.¹¹⁹

***Smilax ornata* (Sarsaparilla)** The roots are used as an aromatic alterative agent with hormonal and adrenal supportive properties. Old literature reports the plant to be specific for fatigue, muscle weakness, and poor digestion, and to have slightly warming properties. *Smilax* may be included in formulas for boils, excema, skin eruptions related to hot weather, seborrhea on the scalp and behind the ears, and deep fissures of the hands and feet, worse spring and summer.

***Solidago canadense* (Goldenrod)** Goldenrod flowers have a very high pollen content, being the cause of hayfever and respiratory symptoms when in bloom, but the pollen is also credited with beneficial effects on the prostate and genitourinary system. Goldenrod teas and tinctures may improve prostatic enlargement and improve sluggish urinary flow, and in cases where the urine is thick, and dark, and voided with a high particulate content. *Solidago* also has anti-inflammatory effects and will astringe catarrh in the throat.

***Spilanthes acmella* (Achmella)** Can having a numbing effect on the gums and is specific for dental and oral pain when used locally in mouth washes and pastes. *Spilanthes* may also be included in formulas for Lyme disease, muscle pain and achiness related to infections.

***Staphysagria* (Delphinium, Stavesacre)** *Staphysagria* is used homeopathically or in diluted form for gingivitis with salivation and spongy gums that bleed readily, tooth decay, and dental decay. *Staphysagria* is more readily available as homeopathic than a tincture or dried herb.

***Stellaria media* (Chickweed)** *Stellaria* is a common forest and meadow diminutive trailing plant that is edible with a good flavor. As an herbal medicine *Stellaria* is specific for sharp, transient, ever-changing rheumatic pains that are associated with systemic stasis, congestion, and sluggishness. Other specific indications include joint pains that are worse each morning, stiffness and darting pains that are sore to the touch and worse with motion, sharp pain in the small of the back, over the lower ribs, gluteal muscles that radiate down the legs. The plant may be taken internally as a fresh succus, tincture, or tea, and may also be prepared into poultices, plasters, and salves. Topical preparations are used on wounds, as well as for chronic pain in the calf muscles, bruised sensations, and chronic tendonitis.

***Stillingia sylvatica* Sillingia** is specific for chronic dermatitis of the hands and fingers, chronic skin ulcers, chronic skin complaints associated with swollen glands, and what was at one time referred to as “scrophula”. *Stillingia* is especially indicated for skin complaints where liver congestion with jaundice and constipation accompany. *Stillingia* is also specific for sensation of deep aching in the bones. *Stillingia* is a warm herb that can be used topically or orally as synergist or specific in allergy formulas, rather than a base herb, not having any particular nourishing or direct anti-allergy effects. It is generally only available as a tincture.

***Symphytum officinalis* (Comfrey)** Comfrey is one of the best remedies for traumatic injuries to the bones, tendons and joints. Comfrey is indicated for chronic pain and soreness following injuries, fractures, and surgical procedures, and may heal non-union fractures. Comfrey can be used both internally and topically. The mucilaginous roots are used fresh and dried plants prepared to use topically on lacerations, abrasions, and burns. *Symphytum* has demulcent

and cell proliferating effects making it appropriate in formulas for mucosal irritation, inflammation, and ulceration, to both allay pain and promote healing. *Symphytum* is useful orally and homeopathically for trauma to the eyes, or to use directly in the eye for scratches, trauma and irritations, as a compress for blepharitis, eye lid injury, one of the best choices, both botanically and homeopathically for eye trauma. *Symphytum* may also be used to thicken tincture formulas and help the ingredients cling to the throat in cases of oral, pharyngeal, and esophageal irritation. Sitz baths of comfrey infusions and decoction may be used postpartum, and to allay the discomfort of pruritis ani and anal fissures, or following hemorrhoid or other genital and rectal surgeries. Leaf and root teas and tinctures are taken internally for soft tissue trauma, broken bones, poor healing wounds, and weak connective tissues and fingernails. Comfrey may improve bone density in cases of osteoporosis. Comfrey may also allay the pain of wounds and burns and speeds cell division to promote healing.

***Syzygium cumini* (Cloves)** Cloves can be included in teas and tinctures to treat diabetes, hyperglycemia, glycosuria, weak, thirsty, emaciated.

***Tabebuia impetiginosa* (Tahebo, Pau D'arco)** *Tabebuia* is a broad acting antimicrobial herb with additional anti-inflammatory, and drying and astringing effects. *Tabebuia* might be considered topically for fungal infections of the skin that are triggering allergic reactivity, or as a mouthwash for thrush or oral inflammatory situations *Tabebuia* is an anti-fungal to include in formulas for oral thrush and infections. *Tabebuia* tea can be used both locally and systemically when oral microbes related to intestinal dysbiosis as is common in diabetes. Teas and tinctures can also be used topically for fungal infections of the skin, and taken internally for chronic fungal infections of the skin.

***Tanacetum parthenium* (Feverfew)** *Tanacetum* is an excellent anti-allergy herb being appropriate for hives, itching in the skin, dermatitis, migraine, hayfever, and febrile allergic phenomena associated with underlying blood reactivity and autoinflammation. *Tanacetum parthenium* is a classic herb for treating and preventing migraine headaches, asthma, rheumatism, skin inflammation and allergy, and numerous mechanisms of action are being revealed. *Tanacetum* can reduce allergic reactivity, drug side effects and sensitivity, vascular inflammation. *Tanacetum* is not terribly nourishing, but neither is it irritating or dangerous for aggressive dosing or long term use. *Tanacetum* would be appropriate in a significant amount as a base or specific herb in a variety of allergic condition formulas, especially allergic activity in the blood and blood vessels. *Tanacetum* is usually highly effective to reduce allergic phenomena involving the eyes, hayfever, migraines with eye symptoms, and is helpful in formulas for HEENT complaints that are due to underlying allergic phenomena. *Tanacetum* can also help reduce skin eruptions due to underlying allergy, drug side affect, or inflammatory reactivity, and musculoskeletal complaints where allergic reactivity or and allergic constitution underlie. Feverfew is useful to include in formulae for auto-immune conditions to reduced vasculitis and help reduce inflammatory processes, such as in Lupus, rheumatoid arthritis and vasculitis.

Tanacetum parthenium contains parthenolide that inhibits the release of inflammatory substances including histamine from platelets and mast cells, and reduces the formation of pro-inflammatory leukotrienes. Parthenolide also has an ability to limit macrophage driven inflammation.¹²⁰ Parthenolide also has antiproliferative effects on fibroblasts making the plant appropriate for connective tissue pathologies such as rheumatoid arthritis.¹²¹ *Tanacetum* also contains arabinogalactans, a type of immune polysaccharide noted to enhance a variety of immune mechanisms including activation of macrophages and Tumor Necrosis Factor (TNF).¹²² *Tanacetum* has an antihistamine effect due to activity on mast cells.¹²³ *Tanacetum vulgare* has been shown to have vasorelaxing effect via nitric oxide, preventing adrenaline evoked contraction.¹²⁴ *Tanacetum* reduces lipopolysaccharide stimulated tumor TNF, affects the migration of monocytes, and affect genes that regulate inflammatory processes.¹²⁵ Affecting the movement and activation of monocytes may be one anti-migraine mechanism. Blockage of vascular serotonin 5-HT receptors, believed to be involved with migraines, may be another.

***Taraxacum officinalis* (Dandelion)** Dandelion roots are mainly a liver supportive and alterative herb, used for complaints related to liver congestion, constipation, or poor nutritional status, while the leaf is used as a general diuretic and mineral tonic. *Taraxacum* root teas, tinctures, powder, and medicinal foods are indicated for gastric headaches, biliary insufficiency, jaundice, coated tongue, pain in the right upper quadrant of the abdomen, hepatic torpor and constipation, night sweats due to liver disease, gallbladder colic, headaches due to liver and digestive disturbances, flatulence, enlarged indurated liver, sharp stitching pains, difficult bowel movements, anorexia, coated tongue, nightsweats. The leaves are nourishing and high in mineral and can be used in teas, vinegars, soups, pestos and medicinal foods. Dandelion leaves are indicated for long term use in osteoporosis. Consider *Taraxacum* for raw sore lesions on the tongue especially when associated with loss of appetite and liver or digestive disturbances, and for mapped tongue with a white coat. *Taraxacum* may also be used as a supportive ingredient in formulas where chronic eye complaints occur concomitantly with liver congestion and digestive organ inflammation or difficulty.

Dandelion leaves and roots are also useful for skin complaints related to liver congestion, constipation, or poor nutritional status *Taraxacum* may be employed as a food, capsule, powder, or tea. *Taraxacum* roots can be used as a general alterative when constipation, poor diet, or poor liver and digestive health accompany acne, excema, and any and all skin complaints.

***Thea sinensis* (Green Tea)** Also known as *Camellia sinensis*, Green Tea is widely used for its numerous anti-cancer, anti-allergy, and immune modulating activities, largely credited to the antioxidants known as catechins. Green Tea is also reported to stimulate hair growth in cases of alopecia when used topically. The stimulating effects of *Thea* can be used as a synergist in skin formulas where hypothyroidism and general atony and insufficiency accompany.

***Thuja occidentalis* (Cedar spp)** *Thuja* is specific for warts, condyloma, and fleshy vegetative skin growths, styes, polyps and may be used both internally and topically. *Thuja* has antibacterial and viral properties and the essential oil may be included in topical formulas for warts. Folkloric literature suggests that *Thuja* is specific for skin eruptions that are better in dry climates and worse in warm humid climates, and for an oily complexion with many moles and freckles, as well for a red, dry scalp, dandruff, hair loss, unhealthy nails, ano-genital skin lesions.

Thuja occidentalis is also indicated for gum disease, receding gums, dental decay, and may be used as a diluted tincture as a mouth wash and other oral preparations. Folkloric herbals mention *Thuja* for inflammation of the tongue with blisters on the side, pain, and varicose veins under the tongue. Due to particular antiviral properties, *Thuja* is most specific for warts, condyloma, and abnormal pap smears due to sexually transmitted pathogens, such as HPV. *Thuja* is used topically for genital warts and as a sitz bath for genital discharges. *Thuja* is a “hot”, stimulating, and irritating herb also specific for urinary atony. *Thuja* is also used in small doses to stimulate poor functioning kidneys such as diabetics with renal insufficiency.

***Thymus vulgare* (Thyme)** Thyme is a strong antimicrobial with astringent, warming, and stimulating properties that may be used for cough and throat symptoms associated with upper respiratory infections. Thyme is useful as a tincture in cough syrups, tinctures, and teas to dry mucous in the throat, tonsils, and lungs. Thyme also has antispasmodic effects to help allay coughs. Thyme essential oil is extremely strong and irritating and must be diluted before applying to the skin, but it is helpful for chronic fungal infections seen in diabetes, to kill lice and scabies, in washes for mange in dogs, and other topical skin parasites.

Traditional wisdom emphasizes Wild Yam for colicky pains in abdominal organs including menstrual cramps, poor digestion and flatulence, and for liver and gallbladder pains that radiate to the shoulder or right nipple. Wild yam is also indicated for twisting and boring pains about the umbilicus, and for digestive pain that radiates through the abdomen to the spine. For sudden urgent stools, and for hemorrhoids with pains that radiate upward, Wild Yam is also included in digestive formulas. For weakness in the back and pain with bending over, for sciatic and shooting pains, aching and stiffness in the joints, cramps and prickling pains in the fingers and toes, Wild Yam is included in musculoskeletal formulas. Older herbal texts mention using *Dioscorea* for people who have trouble finding the right names for things.

Tribulus terrestris - sexual debility, premature ejaculation, low sperm counts, impotence, prostatitis

***Trifolium pretense* (Red Clover)** *Trifolium* is a gentle, nourishing herb with rather neutral energy that may be considered in formulas for seborrheic dermatitis with dry, scaly crusts, tibial ulcers. It has gentle alterative, hormonal balancing, and blood moving effects. Red Clover is also specific for seborrheic dermatitis with dry, scaly crusts, tibial ulcers. Genistein content may be useful in hypopigmentation of the skin, protecting melanocytes from

damage and stimulating melanin production. Red Clover is a “blood mover” with hormonal effects used traditionally to support fertility, blood flow, and as a general nutritive tea herb. More modern research supports the use of *Trifolium* for postmenopausal bone density support, but animal studies show the hormonally active isoflavone in Red Clover may be contraindicated in abnormal uterine bleeding due to fibroids. Red Clover may be included in post-menopausal connective tissue laxity, osteoporosis, skin complaints, and weak nails. Modern research supports the use of *Trifolium* for postmenopausal bone density support and may be considered in formulas for osteopenia of the jaw and poor mineral status in the teeth.

***Trigonella foenum-graecum* (Fenugreek)** Fenugreek seeds are specific for insufficient lactation, underdevelopment of the mammary glands, and for improving blood sugar. The hypoglycemic properties of fenugreek seeds led to development of some of the first anti-diabetic drugs, the biguanides. Fenugreek is in the bean family, the legumes, and many legumes have a stabilizing effect on blood sugar and improve insulin resistance.

***Turnera diffusa* (Damiana)** Damiana is most well known as a “aphrodisiac”, although the veracity of this is dubious. More reliably, Damiana is useful for improving sexual debility, impotence, incontinence in elderly, irregular menses at menarche, and low libido due to atony, age, stress, and general exhaustive states.

***Tylophora asthmatica* (Anthrapachaka)** As the name implies, *Tylophora* is a traditional ayurvedic herb used for asthma. *Tylophora* is also specific for acute itching in the skin, dermatitis, hives, and all atopic and hypersensitivity reactions. Research has revealed direct anti-histamine effects.

***Ulmus rubra* (Slippery Elm)** Slippery Elm is a nutritive and demulcent herb to include in musculoskeletal formulas, to soothe the oral and other mucous membranes in cases of Sjogren’s, Lupus, and other collagen vascular diseases. Some studies suggest that the nutritive properties may improve bone density. Slippery Elm may be used as a demulcent to allay oral pain and help heal ulcerative lesions of the oral mucosa such as canker sores, herpetic ulcers, and auto-immune or allergic lesions. Slippery Elm is commonly prepared into lozenges to allay the pain of sore throats. *Ulmus* species are also quite high in minerals and combined with the mucilaginous components, may have trophorestorative effects on the oral mucosa when consumed regularly, long term.

***Urtica dioica, spp* (Nettles)** *Urtica* is a highly nourishing herb with broad utility in herbal medicine, Nettle preparations are useful for allergic conditions, including hives, and itching blotching skin lesions, genital itching, pruritis ani, pruritis vulvae, and itching of the scrotum. *Urtica* is also indicated for profuse discharges from mucous membranes. *Urtica* may also be used for angioedema, both acute and chronically recurring.

Urtica is extremely safe, tonifying and appropriate in teas, tinctures, or encapsulations, for short or long term use, as a base, synergist, or specific herb as most appropriate. Nettle leaves are edible and nutritious and may be picked fresh to prepared into cooked greens and pestos. The leaves can be used as a general mineral tonic in formulas for malnutrition and tooth loss and osteopenia in the elderly. Due to mineral tonification, nettles are also indicated for connective tissue weakness, osteoporosis, loss of bone mass, arthritis. Nettle leaves can also be included in formulas for insufficient lactation, malnourishment, uterine hemorrhage, menorrhagia, metrorrhagia, and itching and burning of vulva. Nettle leaves can be used as a gentle diuretic in cases of fluid retention and premenstrual edema.

Urtica is specific for gout and to facilitate the excretion of uric acid. Nettle roots are used as urinary tonic, and for prostatic enlargement. Studies have shown compounds in the roots to inhibit the 5 alpha reductase enzymes that deter the conversion of testosterone, into the more powerful dihydrotestosterone, that can reduce stimulation of the prostate gland. Modern research suggests that the root and seed may be useful in formulae for female hirsutism to reduce excessive testosterone. Therefore, Nettle is also urinary tonic, and for prostatic enlargement, urinary inflammation.

***Usnea species* (Old Man’s Beard)** *Usnea* is used in teas, tinctures and topical applications for skin infections and fungal infections. *Usnea* is sensitive to pollution and believed to only grow in locations that are fairly

***Vaccinium myrtillus* (Blueberry Bilberry)** The fruits, leaves, solid extracts and tinctures act as a vascular tonic with antioxidant and anti-inflammatory properties on blood vessels, for diabetic retinopathy, to improve circulation to the eyes in cases of macular degeneration, cataracts, failing eyesight of the elderly. Use *Vaccinium* leaf infusions in mouth washes to protect the blood vessels in cases of hyperglycemia and hyperlipidemia and for astringent effects in infections. *Vaccinium* is specific for diabetic microvascular damage. *Vaccinium myrtillus* may help protect the blood vessels in cases of hyperglycemia and hyperlipidemia, slowing the progression of diabetic retinopathy,

nephropathy, and neuropathy. *Vaccinium* may also be included in formulae to treat hives, and blood vessel wall reactivity due to strengthening effects on connective tissue integrity and anti-inflammatory and antioxidant activity.

Blueberry fruits may be included in the diet to support and protect blood vessels. Use blueberries as a regular food or ½ tsp of solid extract daily, or use *Vaccinium* leaves in teas and tinctures for bruising and skin trauma and to improve microcirculation in the skin. Blueberries as food and medicinal preparation may be included in formulas for collagen vascular conditions. *Vaccinium* may help mitigate vasculitis and prevent loss of vessel integrity and function, and help heal following bruising and skin trauma. *Vaccinium* may improve microcirculation in the skin and improve easy bruising and skin damage in the elderly.

***Valeriana officinalis* (Valerian)** Valerian is specific for muscle pain and tension associated with underlying stress. For rheumatic muscle pain, sciatica, and acute muscle cramps, jumping and twitching the muscles. Valerian is specific for tension in the body and mental turmoil preventing sleep. *Valeriana* is indicated for nervousness, hypersensitivity, obsessive thinking, symptoms from worry, stress headaches, and general tension and stress related symptoms. Old folkloric herbals also suggest Valerian for long menstrual cycles with scanty flow.

***Veratrum album* (White Hellebore)** *Veratrum* is a potentially toxic botanical available by prescription only. *Veratrum* is mainly used homeopathically and in drop dosages for states of weakness and collapse, but also indicated for a pale tongue, sensation of coolness, a salty taste in the mouth, and toothaches and sensation of extreme heaviness in the teeth.

***Veratrum viride* (Green Veratrum)** is a potentially toxic botanical available by prescription only. *Veratrum* is a potentially cardiotoxic plant that may be used to allay neuralgia and nerve hyperexcitability. The plant is specific for acute and severe musculoskeletal pain, twitching, convulsive, and lancinating pain, especially when associated with pronounced fatigue and prostration, and tissue congestion. Eclectic authors recommended *Veratrum* for topical use on boils, abscesses, inflamed cystic acne, and cellulitis and claimed it to be one of the best remedies for erysipelas when applied topically. Small internal dosages are to be used simultaneously. Include small amounts *Veratrum* in both topical and internal formulas for herpes labialis and herpes zoster. Due to great toxic potential, *Veratrum* is for use by skilled clinicians in small dosages only.

***Verbena hastata* (Vervain)** Vervain, and other species of *Verbena* are especially used for anxiety and depression. Vervain is often used in formulas for PMS, menopause, mood disorders, stress recovery, and amenorrhea. Include *Verbena* in skin formulae where nervousness underlies or contributes, such as neurodermatitis. *Verbena hastata* is reported to reduce pain and bruising and promote absorption of extravasated blood.

***Viburnum opulus* (Crampbark)** *Viburnum*, as the common name applies, is particularly well-known to reliably treat menstrual cramps. *Viburnum* can improve atony of feeble reproductive organs, spastic uterine pains, for both amenorrhea and profuse menstruation, acts as a partus preparatory to improve labor and delivery, and quiet the uterus in cases of threatened miscarriage. *Viburnum* is also indicated for musculoskeletal tightness and pain useful in cases of spinal stiffness, neck pain, low back pain, especially when accompanied by a sensation of weakness and heaviness. *Viburnum* may also allay cramps and colicky abdominal pains, abdominal and umbilical tenderness, and large hard stools passed with cutting pains and cause soreness of the anus. Above all, *Viburnum* is useful for menstrual cramps, as a uterine tonic for chronic miscarriage, heightened awareness of internal sexual organs, long menstrual cycles with scanty flow and much cramping, also useful as a partus preparatory.

***Viburnum prunifolium* (Black Haw)** *V. prunifolium* can be included in formulas for tight, crampy, and spasmodic musculoskeletal pains, as well as used for cramps and spasms in the stomach and intestines. Digestive disorders associated with nervous tension and cramping in muscles and other body part may also respond to *Viburnum prunifolium*.

Viola odorata, tricolor– *Viola* may be used an antidote for stings from venomous insect. The pulverized fresh leaves topically for seborrhea of children, and for skin lesion with thick scabs and crusts, such as impetigo. It is not readily available however.

***Vitex agnus castus* (Chaste Tree Berry)** Include *Vitex* in formulas for premenstrual pubertal and other cases of hormone-stimulated acne and skin eruptions. *Vitex* is believed to exert an overall progesteric influence making it useful for numerous conditions associated with estrogen dominance from adolescent acne, to PMS, to breast pain

and cysts, to uterine fibroids and PCOS, to climacteric disorders. *Vitex* is reported to affect pituitary dopamine and in turn, reduce hyperprolactinemia. Mastalgia can result from hyperprolactinemia and *Vitex* is reported to be an effective therapy for mastalgia.^{cxvii} Since dopamine also controls the release of LH which promotes testosterone production in men, testosterone and progesterone in women, *Vitex* may improve acne in adolescent males, and reduce the elevated testosterone common in women with PCOS. *Vitex* has been shown to reduce LH and testosterone elevations in men.^{cxviii} *Vitex* has also been shown to reduce prolactin in women with high levels via dopaminergic effects.^{cxviii} *Vitex* may be used in formulas for estrogen dominance, DUB, uterine fibroids, breast cysts, and endometriosis due to high estrogen. *Vitex* is also specific for premenstrual headaches and PMS that abates as the menstrual flow begins. *Vitex* is also very specific for acne at puberty for both young men and women.

***Withania somnifera* (Ashwagandha)** *Withania* is a gentle adaptogenic herb that acts both via effects on the adrenal glands and via binding GABA receptors in the brain. Balancing effects on the hypothalamus-adrenal-pituitary axis may make Ashwagandha useful to treat stress and adrenal disorders associated with high cortisol levels and poor sleep. For people who fall asleep easily but wake around midnight unable to sleep well thereafter, include Ashwagandha in the formula. Ashwagandha may also be included in musculoskeletal formulas when adrenal insufficiency contributes to muscle tension and lack of stamina and is specific in cases of fatigue and weakness with stress and insomnia. Ashwagandha has broad immune modulating effects and is shown to protect hyaluronic acid from inflammatory destruction. (Please see the larger and more detailed paper by Dr Stansbury on this site.)

***Xanthoxylum clava-herculis* (Prickly Ash)** *Xanthoxylum* is a warming, stimulating remedy that brings heat to the stomach, increasing function, circulation, and secretions in cases of digestive debility and insufficiency. *Xanthoxylum* is a mild appetite stimulant in cases of dyspepsia, and is best in those with cold constitutions, weakness, lethargy, and poor circulation. stimulating carminative in cases of dyspepsia and flatulent colic. The plant has a carminative, antispasmodic, and anti-inflammatory action in cases of alcohol or irritant induced gastritis and can help treat diarrhea due to atony of the bowels.

The pungent and bitter bark has an anesthetic effect on the oral mucosa. Tinctures and other preparations may improve neuralgic pains in the mouth and lower jaw and may also improve pharyngitis with a sensation of dryness of the mouth and can stimulate saliva flow in cases of dry mouth in Sjogren's syndrome. *Xanthoxylum* preparations may also be used topically in liniments for relief of arthritic and musculoskeletal pain, and the plant is indicated for neuralgias, sciatica, numbness, and motor weakness and paralysis.

***Zingiber officinale* (Ginger)** Ginger is an all-purpose anti-inflammatory for digestive, musculoskeletal, vascular and systemic inflammation. The warming qualities make ginger preparations well absorbed, circulatory enhancing and most specific in cold and deficient constitution, although broad acting and useful as a supportive or synergistic herb in numerous conditions. *Zingiber* is an all purpose anti-inflammatory for arthritis, joint pain, and musculoskeletal inflammation. Larger doses may be required for the best pain-relieving effects for arthritis. *Zingiber* may help improve microcirculation in the oral cavity when hyperglycemia and hyperlipidemia contribute to gingival diseases.

Zingiber may be used internally and topically for staph infections of the skin offering antimicrobial and immune supportive effects, and may be included in formulas for allergic and inflammatory phenomena. *Zingiber* is a warming, stimulating, carminative in cases of dyspepsia and flatulent colic, and is useful anti-inflammatory in cases of alcohol or irritant induced gastritis, and for diarrhea due to atony of the bowels. It is a warm or even hot herb depending on the dosage and preparation and is best for atonic, chronic, and sluggish health issues. Ginger is often mixed in formula at a lesser quantity than other ingredients due to its heat and strength. Lower amounts of *Zingiber* however, are frequently effective when the herb is used as a warming, blood moving synergist in formulas. It may be added for those with cold constitutions, the elderly or others with poor circulation, and for digestive insufficiency to bring more heat and blood flow to the digestive tract. *Zingiber* may be used as a synergist in formulae where deficiency, coldness, stasis, and digestive insufficiency contribute to various health complaints and diagnoses. It is readily available as tea, powder, capsules, glycerines, and tinctures.

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