

Verbena hastata
BLUE VERVAIN HERB

(A) Botany

Family: Verbenaceae (Vervain).

Synonyms: American blue vervain, American vervain, blue verbena, swamp verbena.

Harvesting: The herb consists of the upper 30-40% of *Verbena hastata* harvested in the early part of its flowering period from early to mid July. The lower 75-80% of the primary stalk and the lower 50-60% of any well developed secondary stalks are not used.

Related Species: There is virtually no research on any of our native species of *Verbena*. *V. bracteata* (prostrate vervain), *V. simplex* (narrow-leaved vervain) and *V. stricta* (hoary vervain) grow in open field habitats in dry sandy or gravelly soil. *V. urticifolia* (white vervain) grows in moist transition areas and open woodlands. Of the four, *V. urticifolia* is the only other species that I have worked with. It has very similar therapeutic properties to *V. hastata* and can be used as a substitute. This may also apply to other species, but I can't verify that at this time. All five of these species are capable of hybridizing with each other, indicating a strong genetic similarity. They also have a very similar flavour. This is a good indication that they have similar chemical constituents and therapeutic properties. Of the species of *Verbena* that are used in Western herbalism, *V. officinalis* (European vervain), the official species in Europe, is the only member of the genus for which there is some research. This species tends to be more commonly used in Europe, whereas *V. hastata* is more commonly used in North America. Some references state that *V. hastata* has similar properties to *V. officinalis*. I can not verify to what degree this is true as I have never seen or used the latter. However, although their ranges seldom overlap and I am not aware that these species hybridize, apparently on a genetic level *V. officinalis* is more closely related to this group than other *Verbena* species even though it is Eurasian. This may indicate a significant degree of similarity between the constituents and properties of *V. hastata* and *V. officinalis*.

Habitat: Perennial. *Verbena hastata* grows in moist soil along the edges of ditches, wetlands, rivers and lakes. It prefers 40-80% direct sunlight, but can tolerate 20-100%.

Distribution: Native. *Verbena hastata* occurs throughout most of the United States and the southern parts of the adjacent Canadian provinces. It is relatively common in most of Ontario except north and west of Lake Superior.

(B) Therapeutics

Administration: Systemically: Fresh or dried herb infusion or tincture. The fresh herb tincture is preferred. Locally: Fresh or dried herb poultice, compress, infused oil or ointment.

Primary Therapeutic Properties: Anticatarrhal, antibacterial, anticonvulsant, antidepressant, anti-inflammatory (local, neural, systemic), antirheumatic, antispasmodic (digestive, general, uterine), antiulcerogenic, antiviral, anxiolytic, aperient, astringent, bitter, cholagogue, depurative, diaphoretic, diuretic, emmenagogue (stimulating, tonic), febrifuge, hypotensive, nervine, relaxant, stomachic, tranquilizer, vasodilator (neural, peripheral), vulnerary.

Secondary Therapeutic Properties: Analgesic, anthelmintic, antihepatotoxic, antimigraine, antineoplastic, antioxidant, antiprotozoal, appetite stimulant, cardiac, emetic (in large doses), expectorant (relaxing, secretolytic), galactagogue, hemostatic (antihemorrhagic, styptic), immune stimulant, lymphatic, sialagogue, uterine (relaxant, stimulant, tonic), vascular tonic.

Primary Organ Systems: Nervous system, digestive system, liver/gallbladder, cardiovascular system, urinary system, musculoskeletal system, female reproductive system, respiratory system, epithelial tissues.

Secondary Organ Systems: Immune system, lymphatic system.

Primary Indications: Conditions of the nervous system (stress, nervousness, anxiety, depression, muscle tension, tension headaches, poor memory, poor concentration, dementia, hyperactivity, insomnia, epilepsy); functional conditions of the digestive system (indigestion, liver and gallbladder congestion, constipation, jaundice, gas, bloating, hepatitis, poor appetite, anorexia, digestive cramping); feverish conditions (influenza, measles, chickenpox, malaria); conditions of the cardiovascular system (poor circulation, high blood pressure, inflammatory conditions of the blood vessels, heart weakness); inflammatory conditions of the urinary tract (cystitis, urethritis, nephritis); rheumatic conditions (rheumatism, rheumatoid arthritis, gout, fibromyalgia); conditions of the female reproductive system (premenstrual syndrome, menopausal symptoms, amenorrhea, swollen breasts, dysmenorrhea, insufficient lactation); respiratory conditions (colds, sinus infections, hayfever, bronchitis); inflammatory conditions of the digestive tract (diarrhea, gastric and duodenal ulcers, mouth ulcers, sore throats, gastritis, colitis); chronic skin conditions (acne, eczema, psoriasis). Locally: Wounds; bruises; sprains and strains; rashes; bites and stings; mastitis; boils.

Secondary Indications: Migraines; nerve pain and inflammation (neuralgia, neuritis). Locally: Vascular weakness and inflammation (varicose veins, spider veins, hemorrhoids).

Research: *Verbena hastata* has demonstrated antibacterial and antioxidant properties *in vitro*; and antidiarrheal, antiprotozoal, antiulcerogenic and sedative properties in animal studies. *V. officinalis* has demonstrated antifungal, anti-inflammatory, antineurotoxic, antiulcerogenic, antiviral and vulnerary properties *in vitro*; and analgesic, anti-inflammatory and diuretic properties in animal studies. Individual iridoid glycosides that occur in *V. officinalis* have demonstrated analgesic, antihepatotoxic, anti-inflammatory, galactagogue, hypotensive, sedative and uterine tonic properties in animal studies. Some of these iridoids have been identified in *V. hastata*.

Formulating considerations: 20-25% (15-50%). Astringency 3, bitterness 3, emmenagogue 3, pungency 0.

Toxicity: None known.

Contraindications: Due to its emmenagogue, depurative and significant nervine and neural vasodilator properties, *Verbena* is not recommended during pregnancy and should be used with caution if taken concurrently with oral contraceptives, anticonvulsant, sedative or mood-altering medications.

Dosage and Duration Restrictions: Class 1b. Due to its bitterness, use in formulations only, up to 50%.

General Comments: *Verbena hastata* is an incredibly versatile herb. It is an excellent nervine for the treatment of all manner of stress-related conditions, anxiety, depression and other mood-related conditions. It is also very effective for tension headaches and to some extent for migraines. As a bitter cholagogue it benefits liver, gallbladder and other digestive conditions, particularly where stress is a significant factor. Its bitterness must always be taken into account when including it in formulations to ensure that the overall formulation is not too bitter or in cases where a significant affect on the digestive system isn't recommended, such as in formulations for insomnia where it would not be good to stimulate the digestive system shortly before bed.

Verbena is an excellent herb for conditions of the cardiovascular system. It improves peripheral circulation, strengthens the blood vessels, lowers blood pressure and benefits heart function. It can be used for the treatment of feverish conditions in both adults and children and will help alleviate respiratory symptoms if they are also present. *Verbena* is one of the better depurative herbs that have significant nervine properties. This is important for the treatment of chronic inflammatory conditions where stress is a significant factor. It seems to have a slightly stronger action for rheumatic conditions compared to chronic skin conditions, but it is effective for both. It has a gentle tonic influence on the female reproductive system. It is particularly effective where stress or liver dysfunction are also a factor.