

STONE ROOT

Collinsonia canadensis L.

Family

Lamiaceae.

Parts Used

Root.

Description

Stone root is a perennial plant that grows 90 to 120cm high. The leaves are light green above and pale green, glabrous, broad, cordate or ovate below, becoming narrower and shorter above. The flowers are dirty yellow, labiate, with red venation on the inside in richly blossomed panicles. The medicinal part is the rhizome and root, gathered and dried in autumn. The rhizome is greyish-brown to black, very hard, fibrous and up to eight centimetres long.

It is very dense, knobby and covered with a thick black mat of fibrous roots. The shoots are glabrous, often tinged red, with few side shoots. Stone root favours moist woodlands with at least 60% canopy cover and elevations less than 500 metres. It is indigenous to eastern North America – from Canada to Carolinas in the US. It is also found in central Europe. The root has a strongly aromatic and unpleasant smell. The taste is unpleasantly bitter.¹

Traditional Use

Stone root (*Collinsonia Canadensis*) is a perennial medicinal herb in the mint (Lamiaceae) family. Other common names include horsebalm, richweed, hardhack, heal-all, horseweed, ox-balm and knob root. The botanical name, *Collinsonia canadensis*, was given to this plant in honour of the English merchant, botanist and Quaker Peter Collinson



(1693 to 1768), whom it is told, had an affinity for transporting and cultivating North American plants. The most commonly used name, stone root, was given to the plant by the Quakers, who were also the first to use the plant commercially. At this time in Europe the plant was not actually used medicinally but has been used by Native Americans and early American settlers for a variety of conditions. Most often the leaves of the plant were crushed and then applied topically to cuts, bruises, ulcers and ringworm. Stone root was included in the materia medica after observing Native Americans using it as a medicinal plant. By 1854 it was listed in the first edition of King's American Dispensatory.^{2,3}

Stone root seems to have been a forgotten medicinal plant. Searching MedLine for "*Collinsonia canadensis*" brings up one result about a new flavonoid isolated from the leaf and stem. "Stone root" does not produce any studies at all. However, stone root was a key herb for both the Eclectics and the Physiomedicalist, and it seems worthwhile to further explore the uses of this medicinal plant in spite of the lack of scientific evidence for its actions.

One of the first uses of stone root by Eclectics was in the treatment of a form of laryngitis known as "minister's sore throat." It was considered to be the best remedy for this condition of over use of the voice. It was also used for chronic laryngitis, pharyngitis and in some cases of chronic bronchitis and tracheitis.⁴

The Physiomedicalists in England soon held stone root in high regard. Cook wrote of stone root in the Physiomedical Dispensary of 1889 that he found it most useful in nervous headache, colic pains and nervous forms of dysmenorrhea and it has been used to good advantage in light cases of leucorrhoea and persistent laxity of the bowels. It's soothing and tonic impression was considered useful in nearly every form of moderate female nervousness. It was considered to be as effective as more pure nervine tonics as motherwort.⁵

Stone root also became a respected homeopathic remedy. Often used in low dilutions or mother tincture. As usual the homeopaths, like the early herbalists, seem to have had great powers of observations and could describe the actions of a remedy in the minute details and with great clarity. These detailed descriptions were used

to differentiate between similar acting remedies. This is not only useful in homeopathy but also in selecting herbal medicines with similar actions. Stone root is described as being indicated for pelvic and portal congestion resulting in dysmenorrhoea and haemorrhoids; congestion of pelvic viscera, with haemorrhoids, especially in latter months of pregnancy; dropsy from cardiac disease (mild congestive heart failure); palpitation; in patients subject to piles and indigestion; where the heart's action is persistently rapid but weak; after the heart is relieved and old piles reappear or suppressed menses return. One of the main specific indications was chronic, painful, bleeding piles where the sensation is as if sticks, sand or gravel had lodged in the rectum; haemorrhoidal dysentery with tenesmus. Another indication, which sounds very much like irritable bowel syndrome, is alternate constipation and diarrhoea; congestive inertia of lower bowel; stools sluggish and hard with pain and great flatulence; constipation. There are no scientific investigations concerning the use of stone root in pregnancy but the old herbalists considered it safe to use for pruritus in pregnancy, with haemorrhoids making it difficult to lie down.⁶

Later, in an Eclectic materia medica of 1905, Petersen repeats the claims that stone root is indicated for a sense of constriction, pain and constriction, with irritation, in throat, larynx, bladder and anus; a feeling as if a foreign body was lodged in the part and for pain in the rectum and lower bowels. Stone root was considered to have a special influence on the nervous system and mucous membranes, removing congestion and improving circulation of the capillaries. It was a valuable remedy in sore throat, laryngitis and pharyngitis, with relaxed and enfeebled capillary circulation.⁷

Ellingwood, in *The American Materia Medica, Therapeutics and Pharmacognosy* published in 1919, also states that the specific symptomatology for stone root is in piles with a sense of fullness or of a foreign body in the rectum; in all relaxed conditions of the mucous membranes of the lower bowel.

It works more promptly if there is passive congestion, with blueness or dark discolouration of the membranes, showing imperfect venous capillary circulation. The faeces are described as dry scybala – a hardened mass of faeces.⁸

In modern British herbal medicine stone root is used in the treatment of irritable bowel syndrome, mucous colitis and varicose veins.⁹ Contemporary American herbalist, Michael Tierra, writes that stone root is considered to be a specific organ remedy for the rectum and anus. It has a tonic action upon the bowels and is specific for haemorrhoids caused by constipation with vascular blockage. It is given for rectal pains and inflammation and for dysentery with accompanying rectal problems. Its specific indications seem to be a bearing-down sensation with accompanying heat, constriction and dryness. For rectal problems small doses are preferred: 1 to 2 drops of the tincture in water three or four times daily. It may be taken internally and directly applied to the rectum nightly in the form of an ointment or bolus. It is also used for gastro intestinal diseases such as gastritis, diarrhoea, dysentery and colitis. Outside the gastrointestinal system, stone root mixed with honey is used for sore throat, bronchitis, asthma, chronic laryngitis and tracheitis. Lastly it is used in various female disorders, including excessive and painful menstruation.¹⁰

Constituents

Early (1885) investigations of stone root found it to contain resin, starch, tannin, wax in all parts of the plant, mucilage in the root and volatile oil in the leaves. The therapeutic constituent or constituents of stone root have never been determined. The old Eclectic concentration (or resinoid) quickly became obsolete in the practice of modern Eclectics, who favoured a 1:1 liquid extract.

Stone root is reported to contain about 0.05% essential oil consisting mainly of the sesquiterpenes germacrene-D and caryophyllene, the monoterpenes limonene and alpha- and beta-pinenes and the phenylpropanoi, elemicin (one of the notable constituents in nutmeg).¹¹ Caryophyllene is a constituent of many essential oils, in particular clove and black pepper. Several biological activities are attributed to beta-caryophyllene such as anti-inflammatory, antibiotic, antioxidant, anticarcinogenic and local anaesthetic activities.¹² Germacrenes and pinenes are typically produced in a number of plant species for their antimicrobial and insecticidal properties. Monoterpenes, including limonene, have anticarcinogenic activities by inducing phase II hepatic metabolizing enzymes.

Limonene increases the levels of liver enzymes Glutathione S-transferase (GST) involved in detoxifying carcinogens.¹³ Limonene has been shown to reduce hepatocarcinogenesis by inhibiting cell proliferation and enhancing apoptosis.¹⁴

Stone root also contains caffeic acid derivatives, including rosmarinic acid. It is proposed that the reported activities of stone root are due to the essential oil and rosmarinic acid. It is difficult to attribute the reported actions of stone root to these constituents as they are found in quite low concentrations in root. The leaf contains flavones, including 2,5-dihydroxy-6,7-dimethoxyflavanone, baicalein-6,7-dimethyl ether, norwogonin-7,8-dimethyl ether and tectochrysin (5-hydroxy-7-methoxyflavone).¹⁵

Actions

Tonic, stimulant, stomachic, carminative, alterative, diuretic, diaphoretic and astringent. Some writers also list stone root as an emmenagogue, defined as a remedy which moves blood and relieves pelvic congestion and pain.¹⁶

Therapeutic action

The principal therapeutic action of stone root seems to be exerted upon the venous system and mucous tissues. In the quaint but very insightful language of the Eclectic writers there are three strongly distinctive indications, which serve as a sign-board for its internal administration: Congestion, Irritation and a sense of Constriction. All three indications are frequently due to a congestion of the portal system, upon which stone root has a special action. Stone root has a tonic action on enfeebled muscular tissue, which makes it indicated in atonic conditions of the heart muscles and, more noticeably, on the walls of the veins and capillaries. Haemorrhoids are prime examples of a disease condition characterised by congestion, irritation and constriction.¹⁷

In *Herbal Medication – A clinical and dispensary handbook*, Priest and Priest describe stone root as an organ remedy (trophorestorative) for the gastro-intestinal system. They list its specific characteristics as: Stimulates, cleanses and tones the alimentary mucous membrane – slightly astringent; suitable for catarrhal and atonic conditions; Vaso-constricting to the portal system;

indicated for pelvic/rectal congestion secondary to portal back-pressure and venous stasis. The actions of stone root are listed as alterative, diuretic and tonic.¹⁸ Stone root, while being diuretic and mildly anti-inflammatory and restorative to mucous membranes, is not specifically indicated for kidney or bladder stones.

Pharmacological Activity

Gastrointestinal and Venous System

Haemorrhoids

Haemorrhoids alone, or combined with constipation, especially with a sense of heat, burning or constriction in the rectum; haemorrhoids of pregnancy, with poor venous circulation in the pelvic viscera. Stone root is also used before and after operations for haemorrhoids. Combine equal parts of the fluid extracts of stone root and witch hazel, 1 to 1.5mL of the mixed extracts every two hours. The distilled extract of witch hazel can be injected into the rectum or kept in contact with the external piles by a compress, especially during sleep.^{19,20,21}

Varicosis

Stone root has a long traditional history of use as an oral treatment for varicose veins, often compounded with witch hazel extract.

Pain or Discomfort in the Rectum

For pain in the rectum, from whatever cause, especially pain not attributable to a definite cause; pain after surgical operations or a sensation of weight, constriction and general uneasiness in the rectum and pain in the lower bowels. Either 4mL as a single full dose or 10 drops of the tincture in water every ten minutes. It is also used in the treatment of irritable bowel, flatulent, biliary and infantile colic.²²

Gastritis and Constipation

Stone root is considered an excellent remedy for chronic gastritis or indigestion and lack of appetite; spasmodic condition of the stomach and intestines, especially where the circulation is defective and digestion is attended with pain and nervous symptoms occurring before meals and when there is congestion of the liver and a tendency to haemorrhoids. Also indicated for constipation,

especially with a sense of constriction, heat and weight in the rectum and dry, hard faeces, with contraction of sphincter and contracted and painful perineum.^{23,24}

Dysentery

In subacute proctitis and muco-enteritis, with or following dysentery.²⁵

Laryngitis

In chronic laryngitis or pharyngitis with relaxed walls of the larynx, with dark discoloration and enfeebled capillary circulation, especially in the condition traditionally known as clergyman's or minister's sore throat; where there is a tickle in throat and involuntary coughing, often caused by the overuse of the voice.²⁶

Stone root is highly esteemed for chronic catarrhal diseases of the mucous tissues of the pharynx, naso-pharynx and larynx.

Urinary System

Stone root is used in incontinence of urine, taken after evening meal and at bedtime. This is probably due to a soothing action on the mucous membranes.²⁷

Heart

Stone root is considered a non-stimulating heart tonic improving the strength and character of the heart. It was used for functional heart troubles and it was thought to be especially valuable when the heart is debilitated from protracted fevers or from rheumatic inflammation or overstrain.²⁸

Female Disorders

Stone root is also used for a variety of female disorders including amenorrhoea, dysmenorrhoea, menorrhagia, vicarious menstruation, prolapsed uterus, leucorrhoea, threatened abortion and pruritus-vulvae due to varicosis.

Indications

- Haemorrhoids
- Varicosis
- Pain or discomfort in the rectum
- Gastritis and constipation

- Dysentery
- Laryngitis
- Urinary incontinence, taken after evening meal and at bedtime
- Weak heart
- Female disorders including amenorrhoea, dysmenorrhoea, menorrhagia, vicarious menstruation, prolapsed uterus, leucorrhoea, threatened abortion, and pruritis-vulvae due to varicosis

Energetics

Neutral to cooling, drying.

Use in Pregnancy

No scientific information. Considered safe to use during pregnancy by the early herbalists.

Contraindications

None known.

Drug Interactions

Caution with diuretic drugs and lithium.

Administration and Dosage

Liquid Extract:	1:2
Alcohol:	45%
Weekly Dosage: ²⁹	20 to 105mL

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