

Expert Herbal Reality Resource

Black Root

Names

Botanical Name: *Veronicastrum virginicum* L. syn. *Leptandra virginica* Nutt.

Family: Formally Scrophulariaceae, now Plantaginaceae

Common names: Black root, Culver's root, Culver's physic, Tall speedwell, Bowman's root, Beaumont's root, Leptandra-wurzel and the rather lovely Whorlywort

Description

This single species of hardy perennial belonging to the genus *Veronicastrum* occurs in eastern North America. A graceful upright perennial with whorls of finely-toothed slender leaves and horizontal black rhizomes.

The small, delicate tubular flowers are borne in clusters of dense spikes during summer and early autumn. Their colour ranges from white, blue or pink to purple. The plant can grow to a height of 2 metres with a spread of around a metre.



Introduced into European gardens in 1714 it proved very popular planted along the back of a border due to the tall and elegant spires of flowers. It prefers a sunny spot but will tolerate a bit of shade, and tolerates most soils providing they hold a bit of moisture. Both long and short-tongued bees greatly enjoy the nectar provided by the flowers.

The roots and rhizomes are the parts used medicinally and are harvested in the autumn. The dried roots should be stored for a year before use to lessen their laxative potency.

Constituents

- A bitter compound: Leptandrin (2,3)
- Tannins
- Volatile oils
- Cinnamic acid derivatives
- A glycoside resembling Senegin
- Resin

Traditional use

Veronicastrum, or Black root played a significant role in certain Native American rituals. The root of the plant has powerful purgative and emetic actions when used fresh and was used to induce vomiting as part of purification rituals.

The Menomini used the plant for purification after being 'defiled' by being touched by a bereaved person. It was believed that the root cured typhus and 'bilious fevers', in part by inducing sweating.

The mashed root was used to clean scrofula (tuberculous) sores by the Seneca and Ojibwa whilst the Cherokee chewed the plant to relieve the symptoms of colic and it was used to assist women in labour by the Meskwaki(4).

A couple of the plant's common names come from a Dr Culver, an eighteenth-century physician who promoted the use of the plant amongst settlers as a remedy for chronic constipation and 'liverish' conditions, hence Culver's root and Culver's physic.



It was once included in the United States Pharmacopoeia, however it isn't in such common use these days, possibly due to its reputation as a powerful cathartic when used fresh.

Traditional actions

- Cholagogue
- Laxative
- Antispasmodic
- Diaphoretic
- Purgative and emetic at higher doses

What practitioners say

Digestive system: Black root is indicated for chronic constipation. It is a cholagogue and thus promotes the flow of bile from the gall bladder into the duodenum, increasing digestive activity such as motility and appetite and causing a dose-dependent laxative effect.

In standard doses the dried root can strengthen the functional activity of the organs associated with digestion such as the liver and pancreas and can be of benefit in gallbladder and bile disorders such as cholecystitis (inflammation of the gall bladder).

Skin and Musculoskeletal: Herbalists will often use medicinal plants which have an action on the liver and digestion to promote elimination along with other herbal protocols in the treatment of chronic skin and joint conditions. Black root can be included here as one such herb.

Evidence

Evidence-based research on the medicinal properties of Black root is extremely scant. One preliminary study has been carried out on the anti-acne and antioxidant effects of this herb along with Yarrow (*Achillea millefolium*).

Extracts of whole herb powder of Yarrow and root powder extracts of Black root were used. Minimum Inhibitory Concentration (MIC) was established for anti-microbial activity against two acne causing bacteria: *Propionibacterium acnes* and *Staphylococcus epidermidis*. An ethanolic extract for both plants demonstrated the highest free radical scavenging activity (5).

Further research, especially into the effects of Black root on the liver and digestion are certainly required.

Safety

Black root stimulates the flow of bile (which aids in digestion, absorption and excretion) but if the fresh root is taken, then the effect can be 'violently purgative', inducing vomiting and diarrhoea, sometimes with bloody stools.

These drastic actions are far less of a risk when the root is dried and are further reduced by storing for one year before processing into medicines. It should be taken in small doses, working up over a period of time only if required.

Contraindicated in children, during pregnancy and lactation.

Dosage

5–10g dried rhizome as a decoction up to three times daily. Start with low doses.

References

- 1 Olmstead, R. G. et al. (2001). "Disintegration of the Scrophulariaceae". *American Journal of Botany*. 88 (2): 348–361
- 2 Grieve, M (1931): A Modern Herbal. *Tiger press*. Ed 1992. ISBN 1-83-5501-249-9
- 3 Hocking G. *A Dictionary of Natural Products*. Medford, NJ: Plexus Publishing, Inc. 1997;438, 846
- 4 Austin, D (2004) Florida Ethnobotany. CRC Press. 1st Edition. ISBN 9780429208751
- 5 RM Shah, B Peethambaran (2013) . Screening and Characterization of *Achillea millefolium* and *Veronicastrum virginicum* for Their Anti Acne and Anti Aging Activity. *Planta medica*; 79 – PN84. DOI: 10.1055/s-0033-138765
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