

Expert Herbal Reality Resource

Elecampane

Names

Botanical Name *Inula helenium* L

Family: Asteraceae

Common names: Elecampane, Elfwort, Scabwort, Wild Sunflower

Description

Elecampane is a large perennial herb, native to southern Europe and western Asia and distributed across warm and temperate parts of Eurasia. Possessing large tuberous, branched rootstock and growing up to a height of 3 metres, this striking plant certainly adds character to a border. Large, bright green toothed-leaves, some up to 70 cm long, grow from furrowed and downy stems. Sunshine-yellow daisy-like flower heads appear from mid-summer with slender ray petals and a centre of apricot-coloured disc florets.

The aromatic roots are harvested in the autumn from two to three year old plants. It might be possible to divide a big plant, harvesting just a portion of the root.



Constituents

- Eudesmanolide-type Sesquiterpene lactones including alantolactone and isoalantolactone
- Phenolic acids including chlorogenic, caffeic and hydroxybenzoic
- Flavonoids including quercetin, kaempferol, catechin and epicatechin
- Polysaccharide: Inulin
- Thymol derivatives
- Sterols

Traditional use

Elecampane is used in Western, Ayurvedic and Traditional Chinese medicine.

The roots have been used for thousands of years and the plant was described by Pliny and Dioscorides. It is said Pliny advised not to let a day go by without eating some of the roots of Enula (Inula), considered to help digestion and cause mirth. An old saying - 'Elecampane will the spirits sustain' also points to the use of elecampane as a general tonic as well as a remedy for various ailments.

Preparations such as teas, pills, powders, syrups, tinctures and lozenges are all utilised for the administration of this wonderful herb. In the 1800s Elecampane lozenges were readily available from chemists for use in irritated and inflamed respiratory mucous membranes. A piece was often eaten night and morning by sufferers of asthma.

The herbalist John Gerard remarked that "The flowers of this herb are in all their bravery during June and July; the roots should be gathered in the autumn. The plant is good for an old cough, and for such as cannot breathe freely unless they hold their necks upright; also it is of great value when given in a *loch*, which is a medicine to be licked on. It voids out thick clammy humors, which stick in the chest and lungs".

Gerard's mention of holding the neck upright may be a reference to its benefit for those suffering from chronic obstructive pulmonary disease and a posture sometimes adopted by people with advanced emphysema.



Traditional actions

Antimicrobial, expectorant, bronchospasmolytic, digestive bitter, diaphoretic, anthelmintic (used to treat intestinal worms), antioxidant, a general and respiratory tonic.

What practitioners say

Respiratory system: Excellent for phlegmy coughs that produce thick mucous. Elecampane combines well with White horehound for bronchial catarrh. It is also used in emphysema and asthma due to its ability to help the body in expelling phlegm and relaxing bronchial spasm. Its antimicrobial effects make it a good choice in bronchitis and it has a long history of use in the management of tuberculosis.

Digestive system: Very useful where there is sluggish digestion, intolerance of fatty foods, wind and bloating, it stimulates peristalsis and the secretions of the digestive tract, perking up the appetite. Another use when combined with other *anthelmintic* herbs such as wormwood and pumpkin seeds is for intestinal worms.

Fatigue: Elecampane can be used in cases chronic fatigue and convalescence for its warming, tonic effects.

Evidence

Elecampane has a long history of use in the treatment of respiratory and digestive diseases in both humans and animals, however there are some promising findings (in vitro only so far) showing the sesquiterpene lactones within the roots to possess cytotoxic and antiproliferative effects on cancer cell lines, ^{ii, iii}.

There is also evidence for anti-inflammatory effects. One study showed a suppression of neutrophil-binding (a type of immune cell) binding via downregulation of Beta 2 integrin (a type of protein that allows certain immune cells to come out of circulation and into inflamed tissues) and suppression of the release of IL-8, TNF-alpha and

IL-1Beta, (pro-inflammatory substances). These effects were comparable with the use of Budesonide (a steroidal inhaler used in asthma, and chronic obstructive pulmonary disease).^{iv}

Antibacterial ^v, antifungal ^{vi}, and anthelmintic ^{vii} activities have also been evidenced in vitro.

Safety

To be avoided in known sensitivity to members of the Asteraceae (Daisy) family.

No safety concerns if taken within the recommended dosage range. High doses may cause nausea, vomiting or diarrhoea, likely due to the sesquiterpene lactones.

Dosage

Decoction of the dried and chopped root: 4.5-12g per day of the dried root

4-9 ml per day of a 1:3 strength tincture

References

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- v Stanojević, D et al. (2010) - In vitro synergistic antibacterial activity of *Helichrysum arenarium*, *Inula helenium*, *Cichorium intybus* and some preservatives, Italian Journal of Food Science, 22, 210–216.
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- viii Greer, J M. (2017). *The Encyclopedia of Natural Magic* (First ed.). Woodbury, Minnesota: Llewellyn. p. 101
- ix Grieve, M (1931) *A Modern Herbal*. Tiger press. Ed 1992. ISBN 1-83-5501-249-9

