

Expert Herbal Reality Resource

Hyssop

Names

Botanical Name: *Hyssopus officinalis* L

Family: Lamiaceae

Common names: Hyssop, Jupha (Hindi), Zufa (Arabic)



Description

Not to be confused with Hedge Hyssop (*Gratiola officinalis*) or Anise hyssop (*Agastache foeniculum*), *Hyssopus officinalis* is a perennial herb, native to central and southern Europe, western Asia and northern Africa. It grows up to a height of around 2 feet with a similar spread. A member of the mint (Lamiaceae) family, it possesses the characteristic tubular, lipped flowers and square stems. It responds well to trimming and may flower twice in a year if this is timed well. It has small, dark-green, slender pointed leaves and dense spikes of flowers. It is usual to see beautiful deep purple-blue flowers, however there are plants which produce white or pink flowers. It is an excellent attractor of bees and butterflies, tolerates droughty conditions well and likes scrubby, sunny, well-drained soils.

Harvested when in flower, the whole plant has a pleasant scent, the leaves as well as the flowers being richly aromatic.

Constituents

- **Flavonoids:** apigenin, quercetin, diosmin, luteolin
- **Terpenoids:** marrubiin, oleanolic and ursolic acids
- **Phenolic compounds:** chlorogenic, protocatechuic, ferulic, syringic and caffeic acids
- **Volatile oils:** pinocamphone, isopinocamphone, pinocarvone, beta-pinene, camphor, thujone
- **Resin and tannins**

Traditional use

Hyssop has a long history of use, both as a kitchen herb, flavouring food and drink, and within the medicine chest. Commonly used for conditions of the respiratory system in such presentations as coughs, chronic catarrh, asthma and bronchitis.

It is diaphoretic, (promoting perspiration), especially when taken as a hot tea, so has often been used for feverish colds.

Along with these applications it has a reputation as a tonic herb on other areas, such as the urinary tract, digestive and nervous systems. Grieve describes Hyssop tea as a “Grateful drink, well adapted to improve the tone of a feeble stomach”.^{iv}

The green tops of the plant were given as a tea or within soup given to asthma sufferers^{iv} and It has also been prescribed for anxiety states and hysteria.^v

Traditional actions

Anticatarrhal, expectorant, astringent, bitter, antimicrobial, carminative, antioxidant, anti-inflammatory, febrifuge (fever remedy), sedative and spasmolytic.

What practitioners say

Respiratory system: Hyssop combines well with mullein or liquorice for stubborn coughs. Taken in combination with more antimicrobial lung herbs such as thyme, garlic or elecampane it is excellent in cases of bronchitis. It is a herb that fell out of favour in some traditions, however, it deserves to be back in the limelight for its excellent ability to induce sweating in fevers, provide a powerful expectorant activity and act as a tonic assisting in convalescence.

For the common cold it combines well in tea form with elderflower, boneset, peppermint and yarrow and it can be beneficial for asthma, being anti-inflammatory and relaxing smooth muscle constriction.

Digestive system: The bitter terpenoid marrubiin has a stimulating effect on the digestive tract, increasing motility and secretions, including those of the liver. The oils contribute to the carminative activity helping in bloating, wind and lack of appetite. It has a tonic activity which has a beneficial effect on the whole body.

Skin: The flowering tops have been made into poultices or infused in oil and used for cuts and bruises. This application can also be of use for joint and muscle pain.

In children: Hyssop can be given for feverish colds and persistent coughs in children in combination with other appropriate herbs such as lime blossom, elderflower, calendula and chamomile. It has a calming action which adds to its use here.

Evidence

In vitro, whole extract of Hyssop has shown antimicrobial activity against gram positive and gram negative bacteria along with an antioxidant activity.ⁱⁱ

Extracts of the essential oils of hyssop have been evaluated for their antimicrobial activities and findings showed the pink-flowered form as having equal amounts of the essential oils pinocamphone and isopinocamphone and



demonstrating more activity against gram positive bacteria than the white-flowered form, which has primarily pinocamphone.^{vi}

The essential oils have also demonstrated antifungal properties against drug-resistant strains of fungi from *Candida* and *Aspergillus* species.^{vii, viii}

Antiviral activity against human immunodeficiency virus type 1 (SF strain) in HUT78 T cell line and primary cultures of peripheral blood mononuclear cells has been observed using an isolated polysaccharide extract from Hyssop (MAR-10).^{ix}



There are currently no human studies on the whole plant extract.

Safety

Hyssop is contraindicated in pregnancy and lactation. It is advisable to avoid its use in those suffering from epileptic fits.

It is important to stress the difference between taking a medicine made using the whole herb as opposed to the extracted volatile (essential) oils, which are much stronger when isolated from the myriad other beneficial constituents within the whole plant.

The essential oil is subject to legal restrictions in some countries. It is neurotoxic at a dose that can vary amongst individuals when given internally, this is owing to the high levels of volatile oils such as thujone, pinocamphone and isopinocamphone. Excessive doses can cause epileptic fits and death.^x

The whole-herb use is much safer and the more usual way for hyssop to be taken.

Dosage

Dried dose for tea: 2-4 g three times daily

1:5 tincture: 2-4 ml three times daily

References

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