

EverGreen

Plant part: Aerial Parts

Scientific name: *Hyssopus Officinalis*

INCI name: Hyssopus Officinalis Extract

IECIC 2015 name: HYSSOPUS OFFICINALIS EXTRACT



EverGreen

Product Name: EverGreen

Plant Name: Hyssop

Hyssopus officinalis' name derived from the Greek meaning "to cleanse sacred places. It is a herbaceous plant of the genus *Hyssopus* native to Southern Europe, the Middle East, and the region surrounding the Caspian Sea.

Hyssop is a brightly coloured shrub or the during the summer produces bunches of pink, blue, or, more rarely, white fragrant flowers.



Harvesting Hyssop

The hyssop we use in our extracts at The Secrets of Caledonia is certified organic and grown in England.

The farmers are always looking for ways to achieve sustainability and produce as little waste as possible, in line with our company values.



HYSSOP

Traditional Use

Hyssop has a long medicinal history where the leaf was used as a bathing agent to cleanse the skin and improve poor circulation. Antioxidant activities of hyssop were scientifically evaluated by identifying active compounds such as isoquercitrin, rutin and ferulic acid. Hyssop extracts have also shown antimicrobial activity against Gram (+) and (-) bacteria, as well as pathogenic fungi. Further research has shown that hyssop has an anti-inflammatory effect by regulating the secretion of IL-4, IL-17 and IFN- γ .

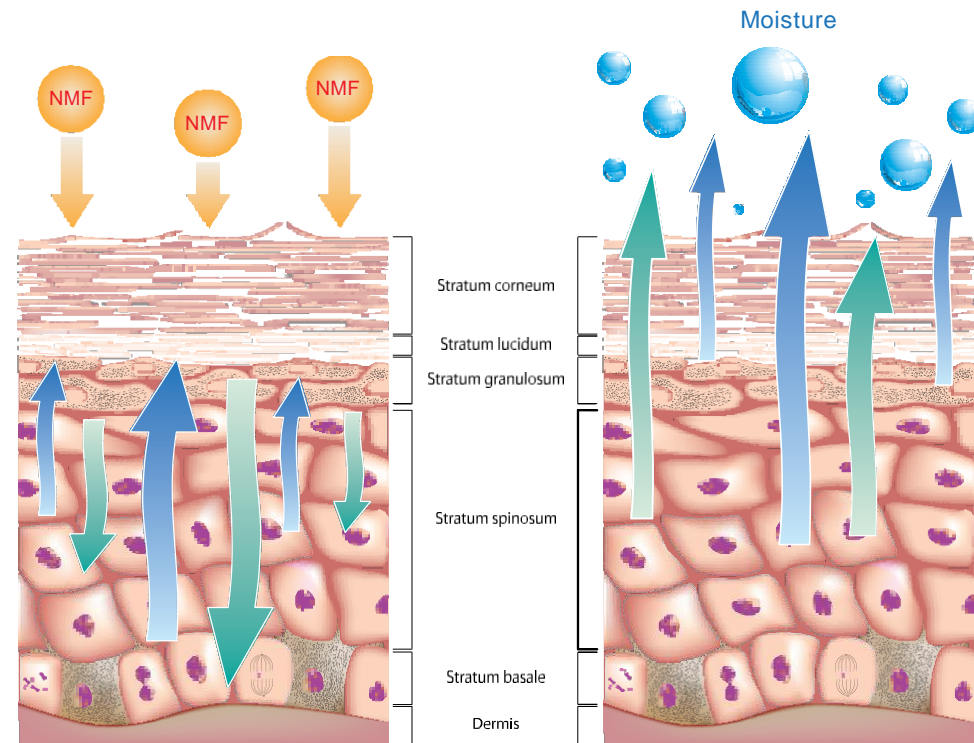
[1] Chemical composition, antimicrobial and antioxidant activities of hyssop (*Hyssopus officinalis* L.) essential oil, Kizil et al., Not Bot Hort Agrobot Cluj, 2010, 38(3), p.99-103

[2] Evaluation of antioxidant and antimicrobial activities and phenolic profile for *Hyssopus officinalis*, *Ocimum basilicum* and *Teucrium chamaedrys*, Vlase et al., Molecules, 2014, 19(5), p.5490-5507

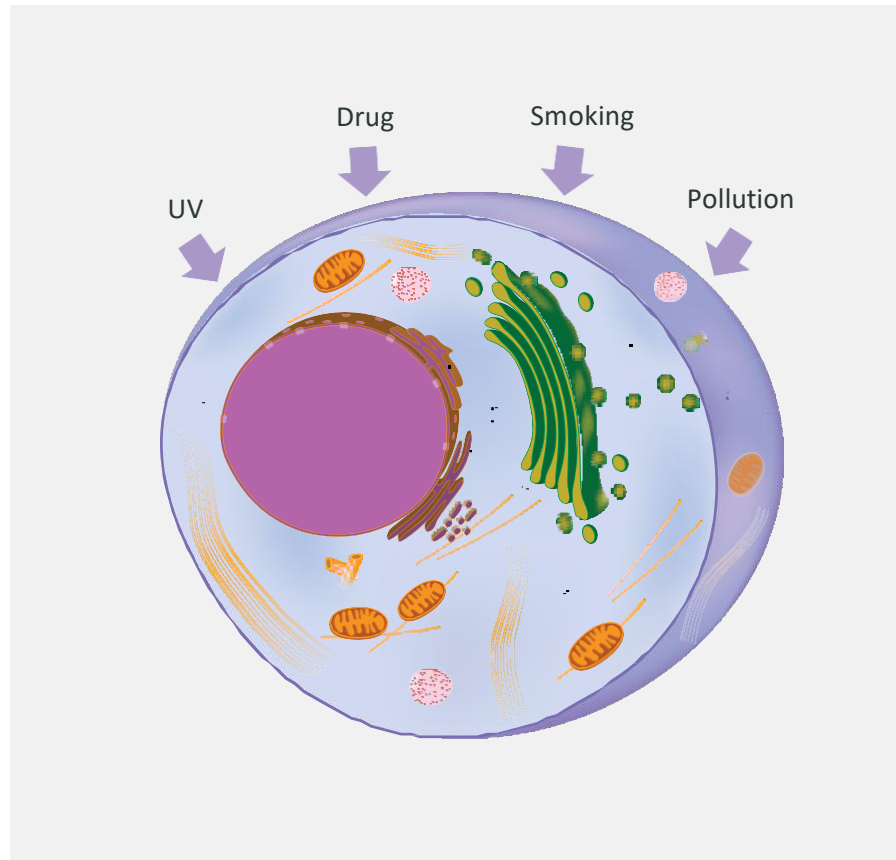
[3] Effect of *Hyssopus officinalis* L. on inhibiting airway inflammation and immune regulation in a chronic asthmatic mouse model, Ma et al., Exp Ther Med, 2014, 8(5), p. 1371-1374

Skin Structure

The retention of water in the Stratum corneum (SC) is dependent on two major components: (1) the presence of natural hygroscopic agents within the corneocytes (collectively referred to as natural moisturizing factor) and (2) the SC intercellular lipids orderly arranged to form a barrier to transepidermal water loss (TEWL). The water content of the SC is necessary for proper SC maturation and skin desquamation. Increased TEWL impairs enzymatic functions required for normal desquamation resulting in the visible appearance of dry, flaky skin.



Antioxidants



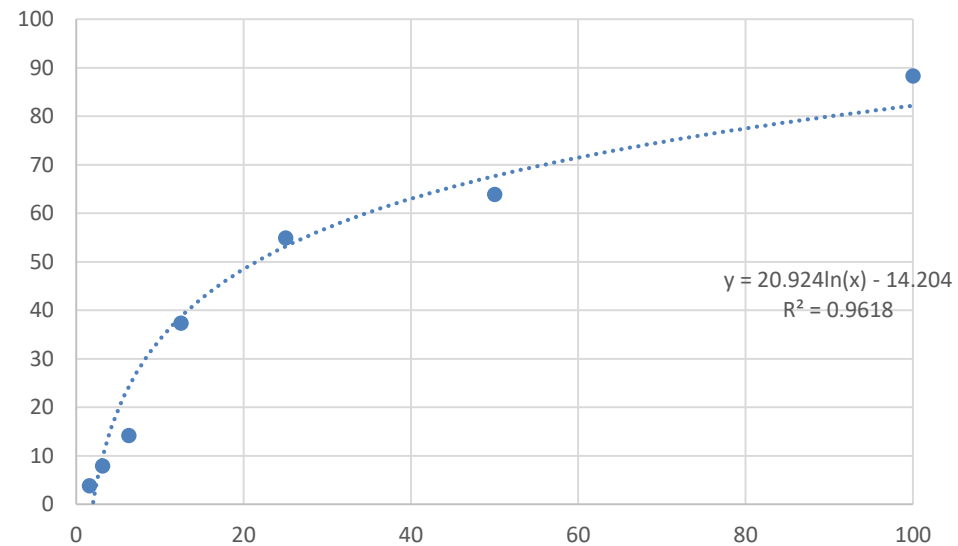
Why are they important?

Our skin is under attack from many factors in daily life, such as UV, pollution and smoking. These factors increase the Reactive Oxygen Species (ROS).

Antioxidants from *Hyssopus Officinalis* Extract can inhibit the generation of ROS and in turn inhibit cellular damage.

Antioxidant Effects of EverGreen (*in vitro*)

Radical Scavenging Activity



SC₅₀: 1.71%

In our test, 1.71% of EverGreen was able to remove 50% of free radicals. Good antioxidant activity is critical for anti-ageing agents in skin care products.

Modern Research

Tab. 2. Antimicrobial activity of *H. officinalis* essential oil

Test bacteria	Inhibition zone diameter (mm)	
	5 μ l	10 μ l
<i>S. pyogenes</i>	19.0 \pm 0.1	23.6 \pm 0.5
<i>S. aureus</i>	18.0 \pm 1.7	21.7 \pm 1.5
<i>E. coli</i>	20.3 \pm 1.8	23.3 \pm 1.7
<i>P. aeruginosa</i>	nd*	nd
<i>C. albicans</i>	15.0 \pm 1.0	20.0 \pm 1.1

*nd: not detected

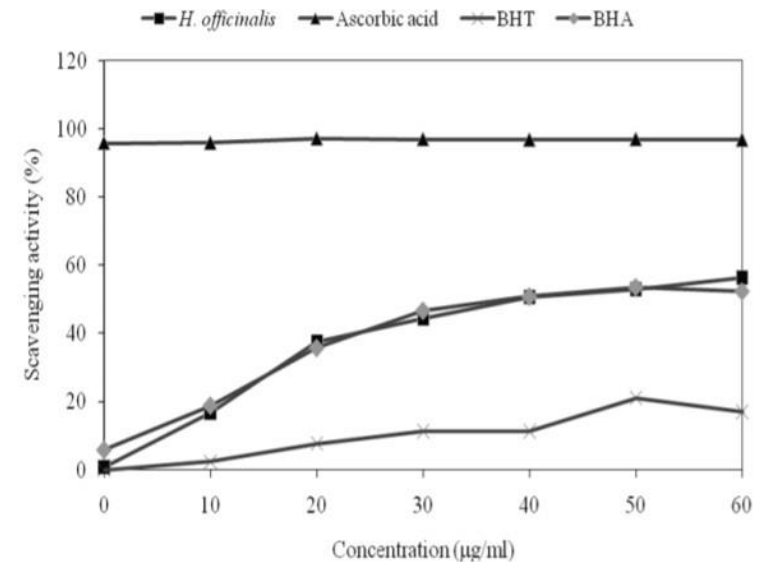


Fig. 1. The DPPH radical scavenging activity of some synthetic antioxidants and *H. officinalis* essential oil

GC-MS analysis of hyssop showed major compounds as isopinocampone, β -pinene, terpinene-4-ol, pinocarvone, carvacrole, p-cymene and pinocampone. There were many other compounds in minor amounts.

Hyssop possesses good antibacterial activity. Furthermore, the study also revealed that even low amounts of the hyssop had detectable antioxidant activity.

Reported functions

Ingredient : HYSSOPUS OFFICINALIS EXTRACT 

INCI Name	HYSSOPUS OFFICINALIS EXTRACT
Description	Hyssopus Officinalis Extract is an extract of the leaves of the Hyssop, <i>Hyssopus officinalis</i> L., Labiatae
INN Name	
Ph. Eur. Name	
CAS #	84603-66-7
EC #	283-266-2
Chemical/IUPAC Name	
Cosmetic Restriction	
Other Restriction(s)	
Functions	<ul style="list-style-type: none"> • MASKING • TONIC
SCCS opinions	
Identified INGREDIENTS or substances e.g.	

Source: European Commission [http://ec.europa.eu/growth/tools-databases/cosing/index.cfm?fuseaction=search.details_v2&id=34561]

Product Information

Product Name : EverGreen


INCI name : Hyssopus Officinalis Extract

Dosage : 1 – 3%

Formulation : Add to the formulation
when the temperature is lower than 55°C.
Recommended to add after the cooling process.

Storage : Avoid direct light or UV.
Keep it in a cool and dry area.





The Secrets of Caledonia

The Secrets of Caledonia (TSOC) is a supplier of natural cosmetic ingredients inspired by Scottish traditional herbal medicine. Taking advantage of Scotland's biodiversity and working in collaboration with established Scottish herbalists, we aim to provide the most effective and innovative natural ingredients at the highest quality.



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