

# Silver Shine

**Product Name:** Silver Shine

**Plant Name:** Silverweed

**Scientific name:** *Potentilla Anserina*



# Silverweed

## Silver Shine

*Potentilla Anserina* is native to the Orkney Isles of Scotland.

The flowers of Silverweed open only on sunny days. **All parts of the Silverweed plant are edible and have been used as a medicinal herb** due to its astringent properties and active compounds. Silverweed, when brewed as a tea, has been widely used to treat everything from skin discoloration, to sunburn to **removing blemishes**.



- *Protects skin against oxidative stress*
- *Inhibits skin inflammation*
- *Reduces skin pigmentation*
- *Anti-microbial properties*

## Use in traditional medicine

Silver Shine

*Potentilla* species have been used for a long time in traditional medicine. In Greek and Latin language *Potentilla* species have been known under the names “Heptaphyllon” or “Pentaphyllon” and “Septifolium” sometimes as “Quinquefolium” (Fuchs, 1543).

Extracts were prepared with water, milk, honey and alcoholic solutions and were applied for the treatment of **tooth ache, inflammations of the throat, for wound-healing, jaundice, ulcers of the mouth, dysentery and as a homeostatic.**



Reference: Tomczyk, M., & Latté, K. P. (2009). *Potentilla*—A review of its phytochemical and pharmacological profile. *Journal of Ethnopharmacology*, 122(2), 184-204.

## Use in traditional medicine

### Silver Shine



In Chinese traditional medicine *Potentilla* extracts have been used to treat diarrhoea, hepatitis, rheuma and scabies and as a **remedy for detoxification** (Xue et al., 2005, 2006).

In Tibetan traditional medicine *Potentilla anserina* root extracts have been applied for the **treatment of certain viral infections** (Zhao et al., 2008).

Similarly the same or other (local) *Potentilla* species have been used in traditional medicine of different cultures in Asia, Europe and Northern America.

Reference: Tomczyk, M., & Latté, K. P. (2009). Potentilla—A review of its phytochemical and pharmacological profile. *Journal of Ethnopharmacology*, 122(2), 184-204.

# Multi-efficacy product

Silver Shine

1

ANTI-OXIDATION

2

ANTI-INFLAMMATION

3

SKIN BRIGHTENING

4

ANTI-MICROBIAL

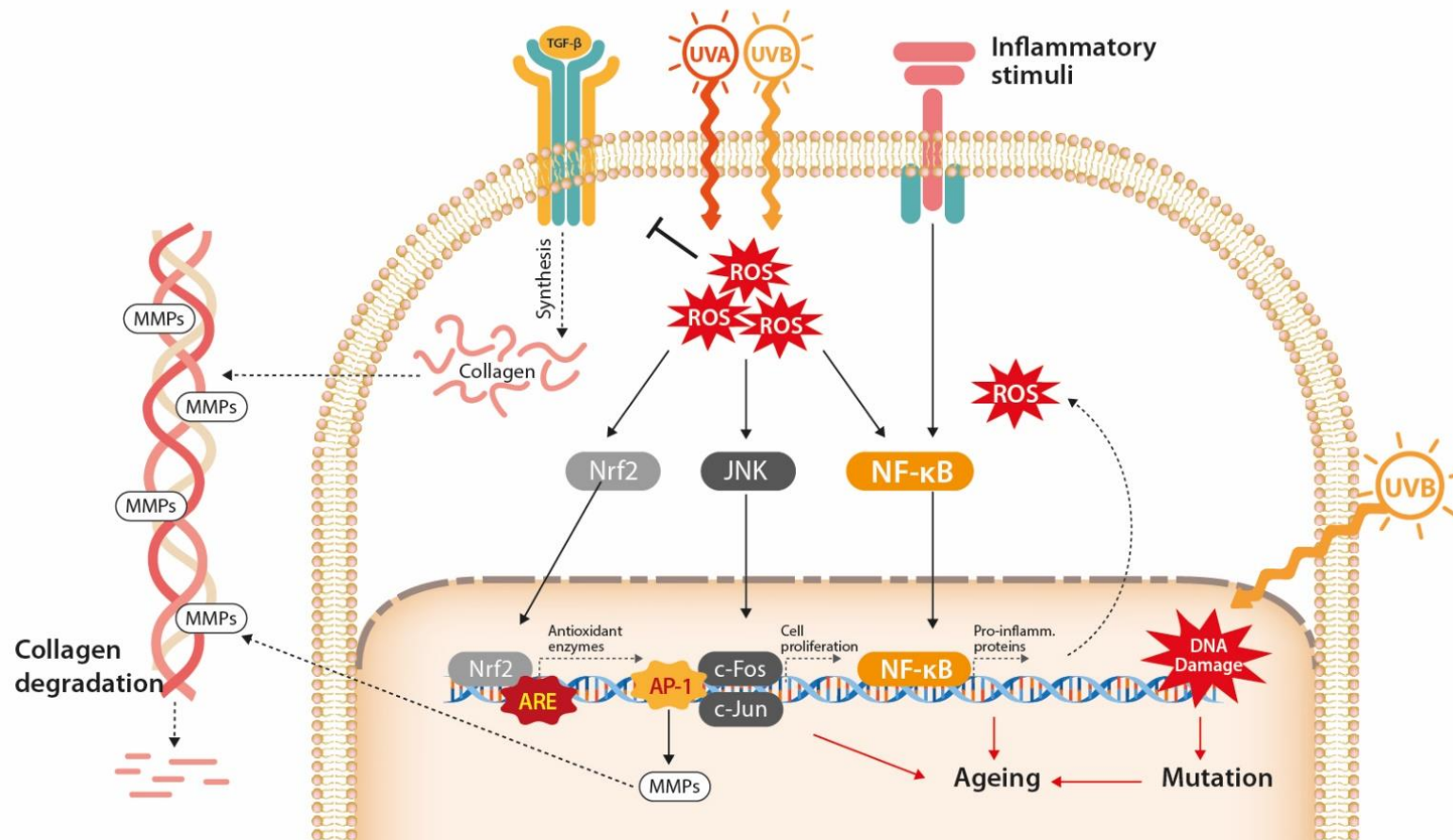




# Oxidative stress mechanism

Silver Shine

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). It causes cellular damage, resulting in skin aging.

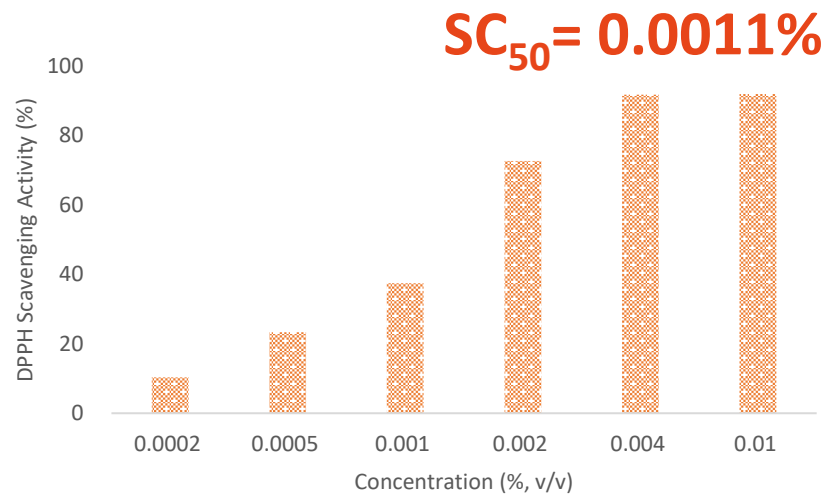


# Anti-oxidant effects of Silver Shine

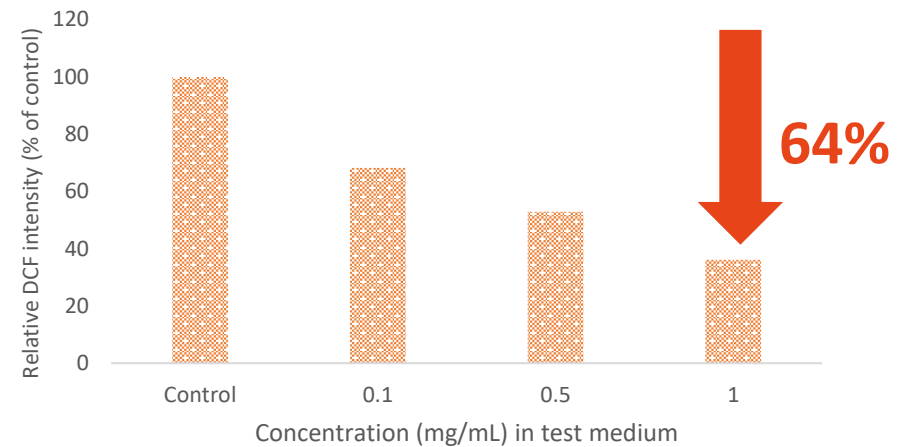
Silver Shine

When testing for free radical scavenging activity, it was confirmed that as the concentration of the Silver Shine increases, the inhibition activity also increases along with it. Silver Shine was also found to reduce oxidative stress by 64%.

Free Radical Scavenging Activity (*in tubo*)



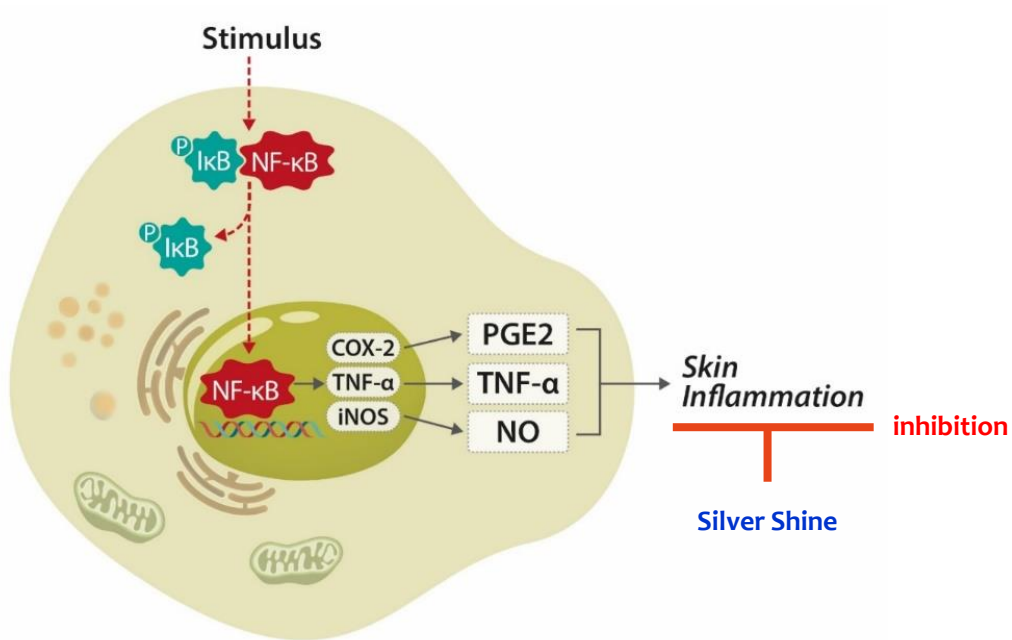
ROS Inhibition Activity (*in vitro*)



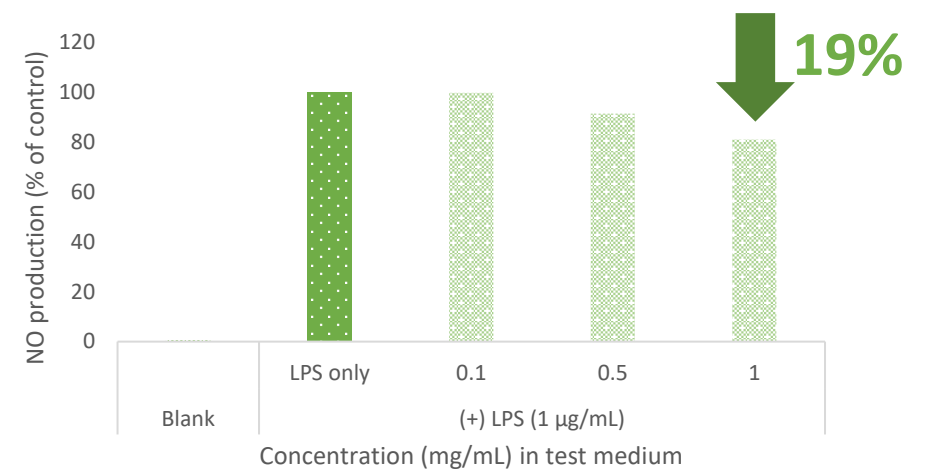
# Anti-inflammatory effects of Silver Shine

Silver Shine

According to efficacy evaluation result, Silver Shine showed anti-inflammatory efficacy by inhibiting Nitric Oxide (NO) synthesis.



NO Synthesis Inhibition Activity (In vitro)

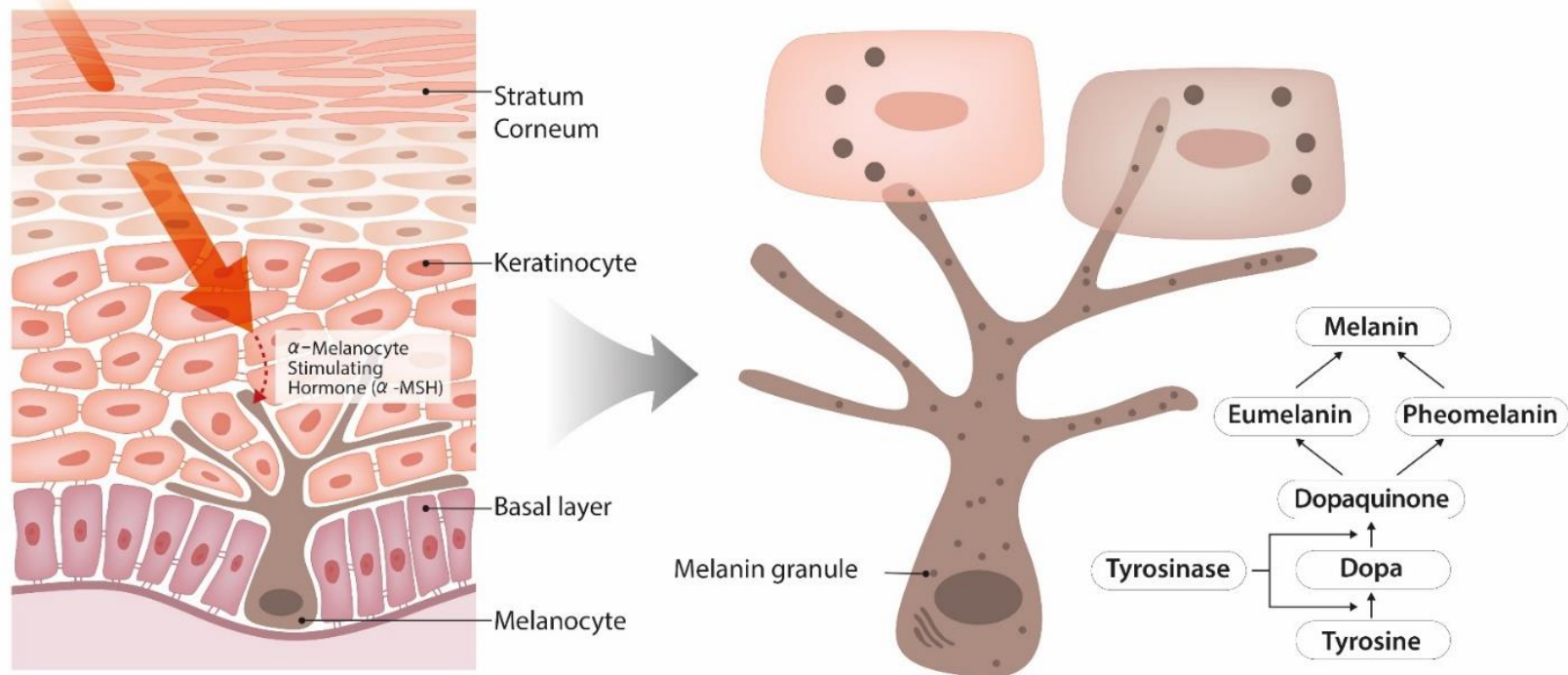




# Skin brightening mechanism

Silver Shine

Melanin synthesized from melanocytes is delivered to keratinocytes and accumulates in the epidermis of the skin, causing changes in skin color. Tyrosinase, which plays an important role in the early stages of the melanogenesis process, converts L-tyrosine to L-DOPA and L-DOPA to DOPA-quinone to biosynthesize melanin.

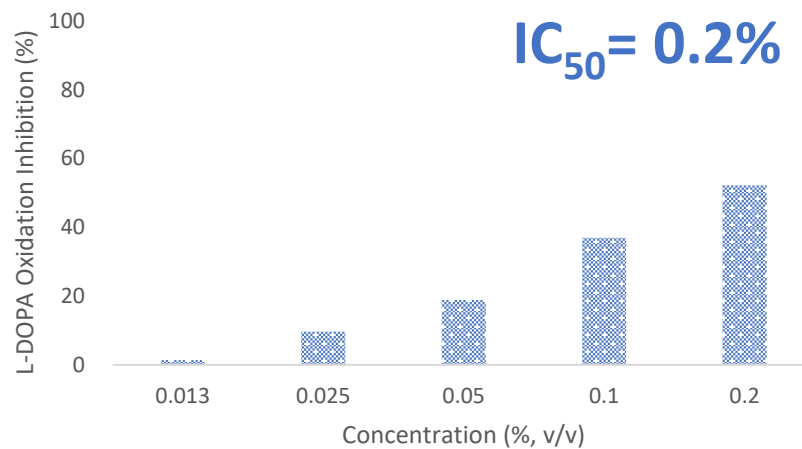


# Skin brightening effects of Silver Shine

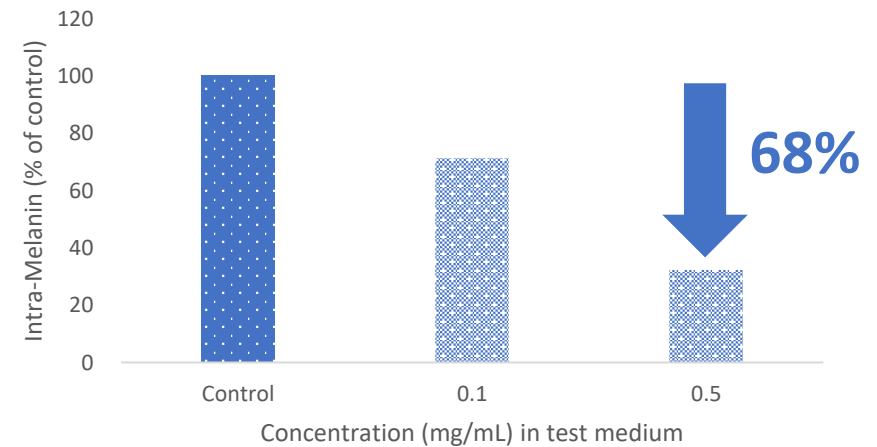
Silver Shine

Silver Shine have a skin brightening efficacy by inhibiting of L-DOPA oxidation. And it inhibits melanin synthesis by 68% at 0.5 mg/mL.

L-DOPA inhibition Activity (*in tubo*)



Intracellular Melanin inhibition Activity (*in vitro*)

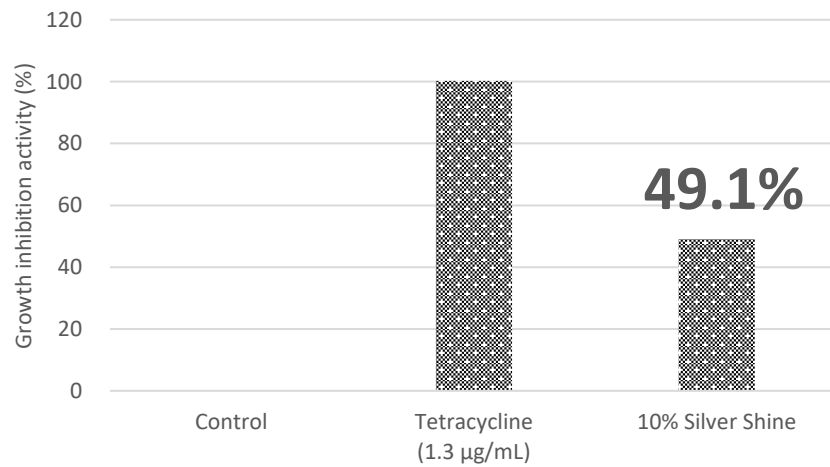


# Anti-microbial effects of Silver Shine

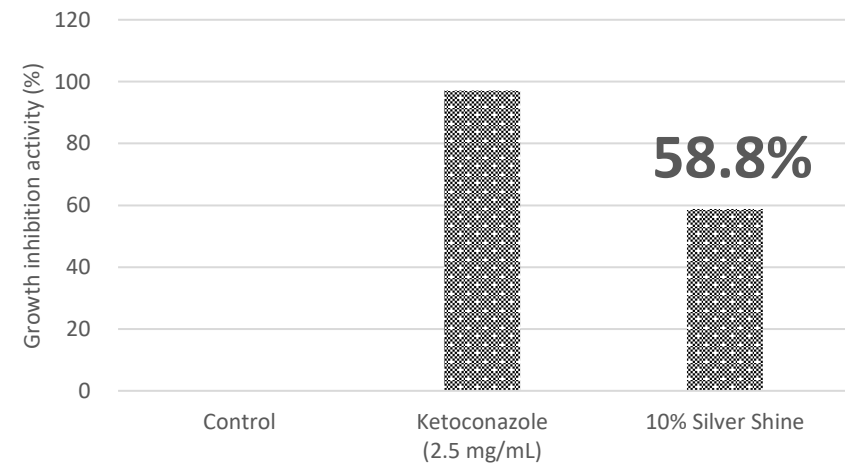
Silver Shine

Silver Shine also confirmed its anti-microbial efficacy by inhibiting the growth of *S. aureus* and *C. albicans*

### *S. aureus* Growth Inhibition Activity



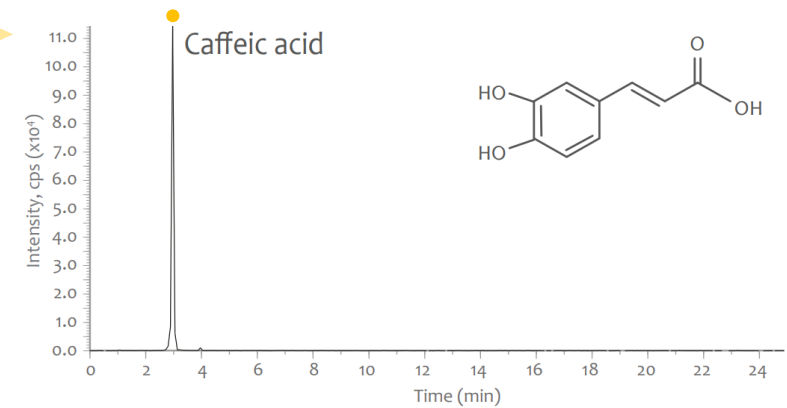
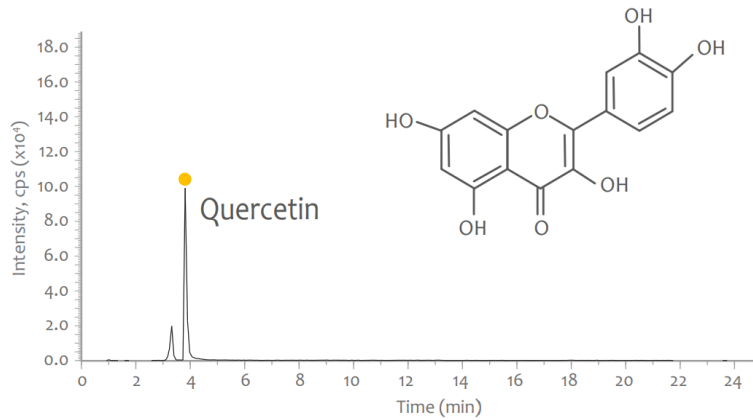
### *C. albicans* Growth Inhibition Activity



# Active compound of Silver Shine

Silver Shine contains Quercetin and Caffeic acid as active ingredients.

Silver Shine



## Summary

- Traditional medicine
- Multi-efficacy:  
anti-oxidation, anti-inflammation, skin brightening, anti-microbial
- Various active compound:  
Quercetin, Caffeic acid



## Product information



**Product Name:** Silver Shine

**INCI name:** Potentilla Anserina 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.



Tel  
+44 (0)131 629 9584



E-mail  
[marketing@tsocalledonia.co.uk](mailto:marketing@tsocalledonia.co.uk)



Address  
Unit 8F Edgefield Road Industrial Estate,  
Loanhead, EH20 9TB