

Anti-acne

Anti-inflammatory

Anti-oxidant

Microbiome-
Balancing

Effective combination for ACNE-PRONE and inflamed skin

INCI: Glycerin (and) water (and) *Cetraria islandica* extract (and) *Juniperus communis* callus culture extract (and) *Usnea barbata* extract.

About

SilvaCell is a combination of extracts that contain Juniper stem cell extract consisting of strong antioxidants and potent antimicrobial compounds from lichens. SilvaCell can be effectively used as a safe and natural alternative of harsh antimicrobials included in skin care products for acne prone skin, and those targeted for sensitive and inflamed skin. High concentration of flavanols, tannins, terpenoids and their derivatives from Juniper stem cells together with organic acids from lichens contribute to specific biological activities.

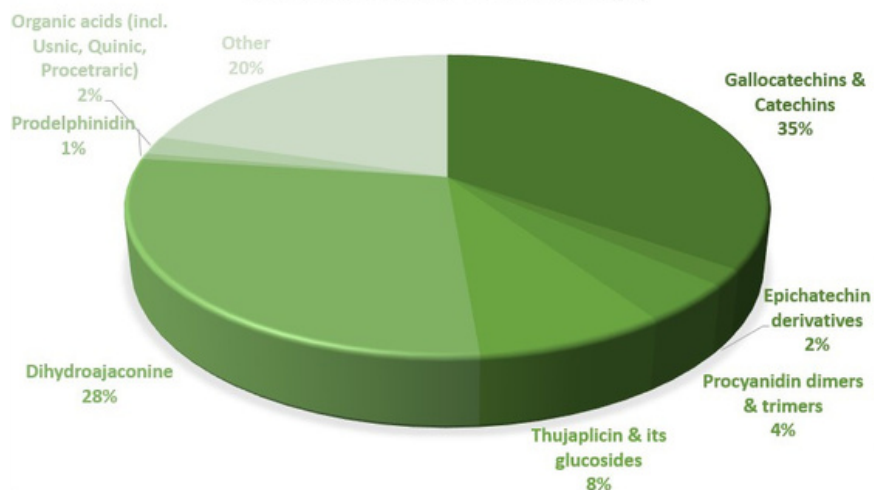
The Plants



Juniperus communis, *Cetraria Islandica*,
Usnea barbata

SilvaCell: Chemical composition

CHEMICAL COMPOUNDS IN SILVACELL (%)



Juniperus communis is one of the oldest plants on earth. It can be found throughout the Northern Hemisphere.

Juniper cells are rich in antioxidants, with procyanidines and flavonoids being among the dominating ones. These are compounds that are strong antioxidants, they have skin regenerating and anti-inflammatory activity. Lichen extracts (from *Cetraria islandica* and *Usnea barbata*) contain valuable antimicrobial compounds. These combined with juniperus cell extracts act synergistically – strong anti-inflammatory and antioxidative activity is combined with skin microbiome regulation.

More Information:

www.alternativeplants.eu



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Contacts:

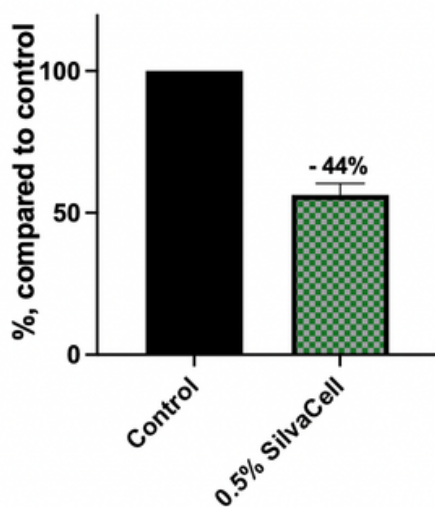
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Efficacy

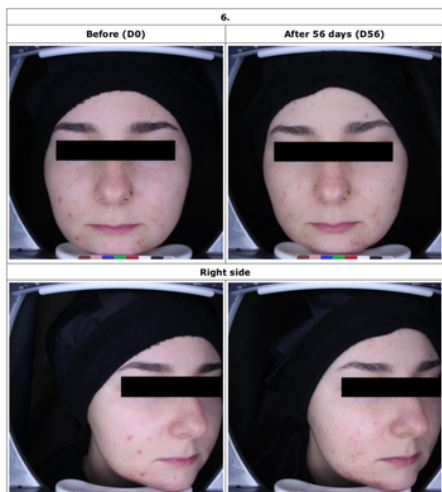
SilvaCell acts towards various mechanisms of skin inflammation:

- Inhibits growth of acne causing bacteria;
- Modulates inflammation;
- Neutralizes free radicals;
- Reduces sebum production

Antioxidative activity

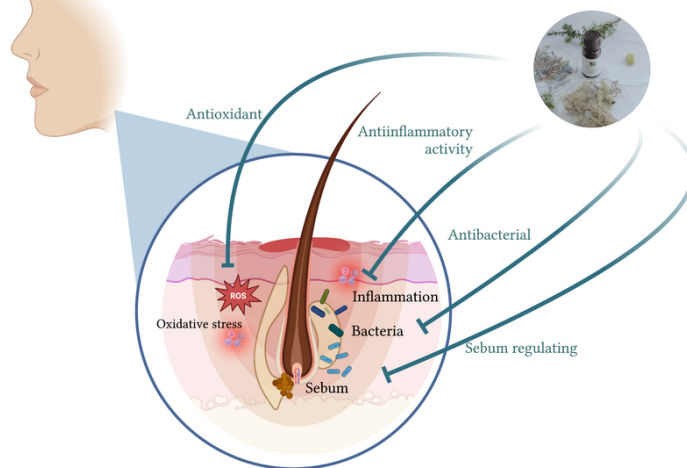


At concentration range of 1.5-3.0% **inhibits growth of acne causing bacteria** like: *Propionibacterium acnes* and *Propionibacterium granulosum*, as well as *Staphylococcus aureus*.



At concentrations as low as 0.5% SilvaCell **scavenges 44% for free radicals in dermal fibroblasts**. This activity is crucial to protect skin from UV and inflammation induced oxidative damages (in vitro study).

Antimicrobial activity



Cream and tonic containing 2% SilvaCell reduced acne lesions and skin inflammation over 56-day use period. **A 20% reduction of sebum production was observed (dermatological study).**

Decrease in sebum production

Mean	69,6	55,5	-14,1
Min	24,7	26,3	-31,3
Max	94,0	83,7	1,7
SD	18,5	14,0	9,8
Median	70,0	59,3	-11,3
Δ%			-20%
% subjects with positive effect			94%

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Technical specification – data sheet

Product	SilvaCell <i>INCI: Glycerin (and) aqua (and) Cetraria islandica extract (and) Juniperus communis callus extract (and) Usnea barbata extract</i>
Appearance	Yellow to light brown/brown. Formation of small amounts of precipitate might be observed and does not affect product quality.
Odour	Characteristic
pH	5.0 ± 1 at room temperature (22... 25 °C)
Solubility	Water soluble
Density	1.10 – 1.20 g/cm ³ at room temperature (22... 25 °C)
Microbiological quality (total plate count)	Aerobic mesophilic bacteria < 100 cfu/g (ISO 21149) Yeasts < 100 cfu/g (ISO 16212)
Recommended concentration for use in cosmetic products	1.5 – 2.5%
Shelf life and storage conditions	12 months Store in room temperature, protect from light.