



*phenbiox*  
SMART NATURAL INGREDIENTS

# COSMETIC INGREDIENTS CATALOGUE

FOURTH EDITION

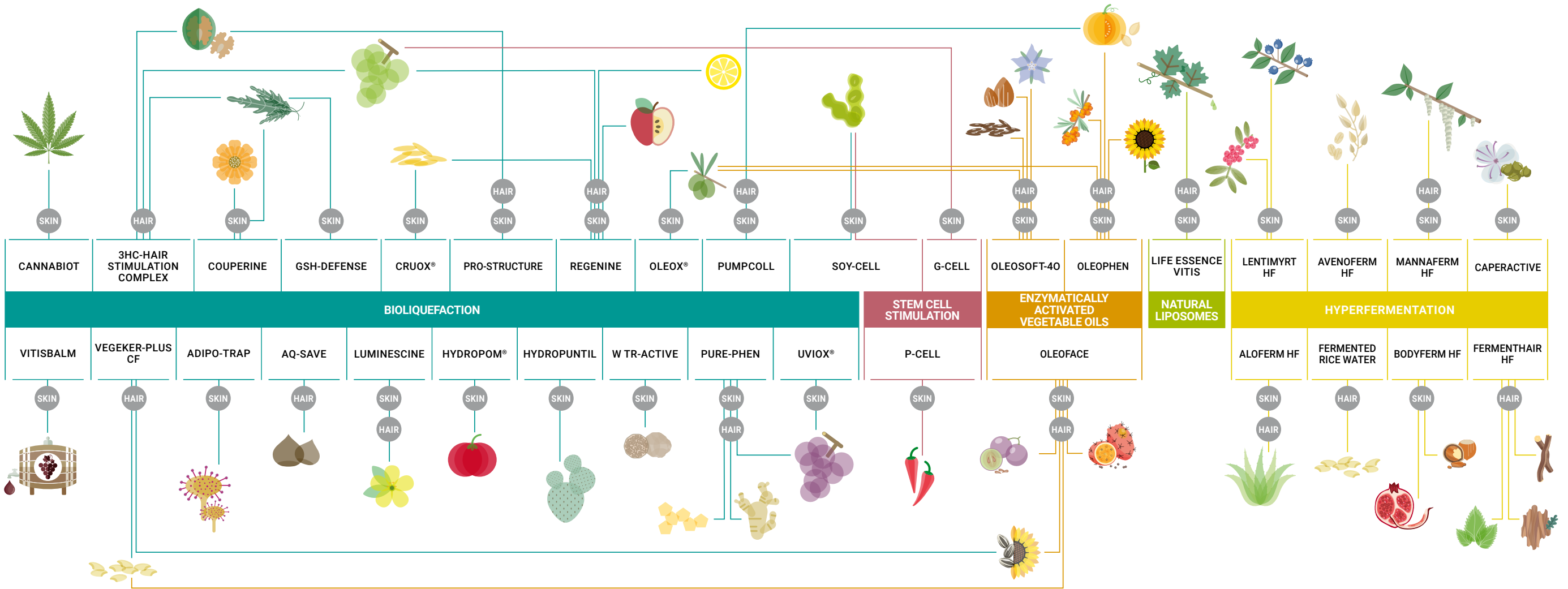


MADE IN ITALY

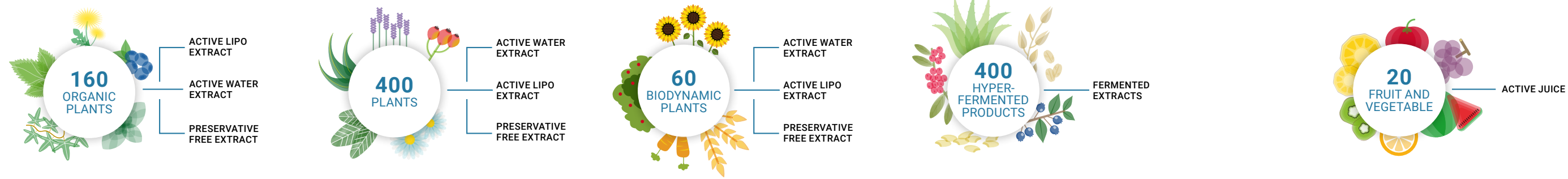


# OUR 2000 INGREDIENTS FOR COSMETICS

## ACTIVE INGREDIENTS



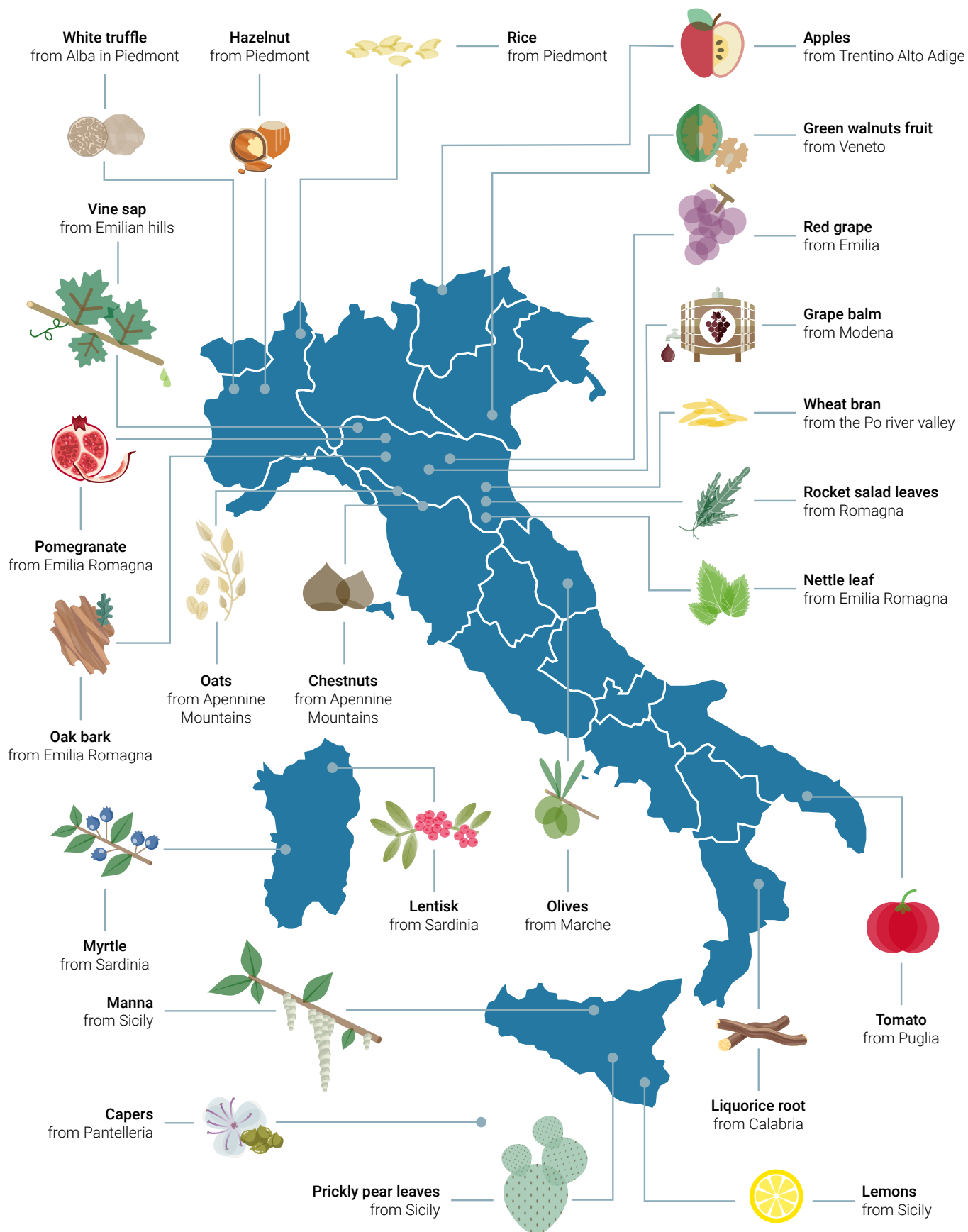
## EXTRACTS



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## INSPIRED BY ITALIAN BIODIVERSITY





# Phenbiox: smart natural ingredients

**20 years**  
of research in cosmetic  
ingredient development

Operates in more than  
**40 countries**

**2000 plant**  
derived cosmetic  
ingredients

**OVER 250 COSMOS**  
certified Ingredients

**35** active ingredients

Set up in 2006 in Bologna (Italy) by researchers specialized in Industrial Biochemistry, Phenbiox now operates in more than 40 countries worldwide, producing and marketing over 2000 plant-based ingredients for the cosmetics industry, obtained through a number of production technologies.

The company's strategy is built on four essential points:

- **Scientific research**
- **Technological naturalness**
- **«Homemade» and Made in Italy**
- **Customization**

## SCIENTIFIC RESEARCH

Our scientific research makes use of an innovative award-winning model, based on a well-established network of inter-departmental cooperation between a number of university research centres involved in Industrial Chemistry, Biology, Biotechnology, Pharmacology, and Dermatology, to name but a few.

This vast network of skills makes our technical-scientific approach highly transversal and effective.

## TECHNOLOGICAL NATURALNESS

Plant mechanisms are our inspiration and our technology platforms are the method we use to transform plant intelligence into efficacious active cosmetic ingredients.

The choice of raw materials and processing techniques means that all our products are Organic or ones that can be used in certified organic formulas. Our production technologies allow us to obtain natural, highly effective and avant-garde products.

## «HOMEMADE» AND MADE IN ITALY

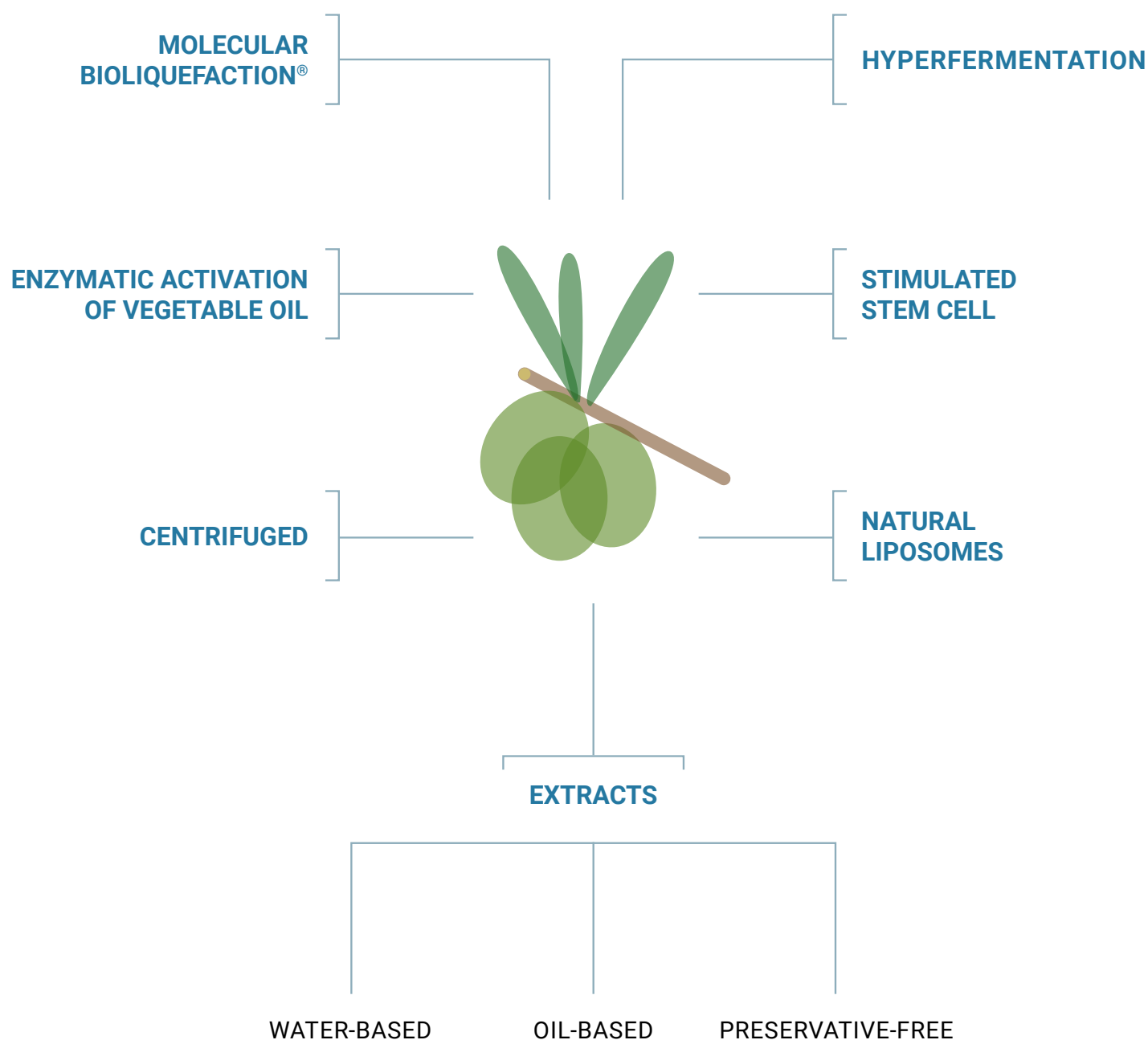
100% of the products that we put on the market are designed, developed and produced in house, right down to the last drop. This ensures complete control of the entire production process, constant product quality and fast delivery times. All our ingredients are Made in Italy and are infused with the inventiveness and the love for craftsmanship, so typical of Italy.

## CUSTOMIZATION

Just like haute couture, the cosmetics sector needs personalized and high-quality raw materials, making us the right partner to work with in devising and producing new ingredients. Our in-house experts can work with your technical and marketing staff throughout the creative process in order to supply truly customized ingredients.

# Technologies

OUR WAYS TO TRANSFORM PLANTS INTO COSMETIC INGREDIENTS



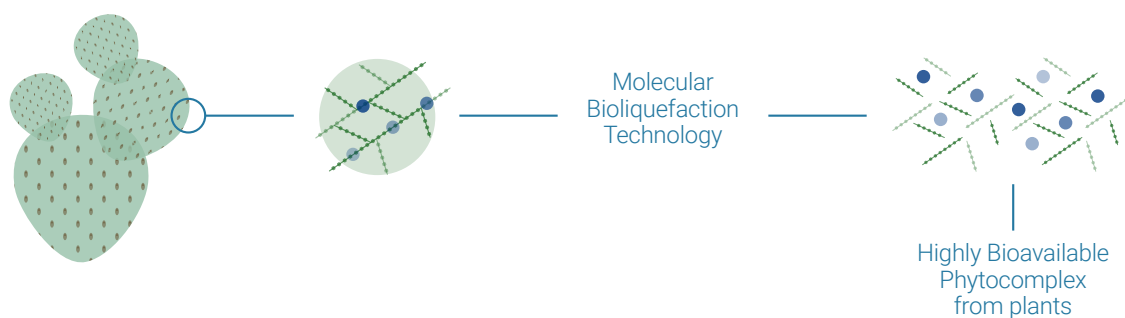


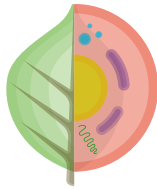
## MOLECULAR BIOLIQUEFACTION®

Molecular Bioliquefaction® Technology is a patented technology developed by the “Toso Montanari” Department of Industrial Chemistry of the University of Bologna and exclusively licensed to Phenbiox. This enzyme-based technology makes it possible to recover 100% of plant bioactive compounds in a completely bio-available and active form as water-based liquid ingredients.

Plant-derived active ingredients still play a primary role in cosmetic products. To produce plant extracts traditional extraction technologies are still mainly used. In plants, thousands of different and interesting target molecules are present, and many of these molecules cannot be extracted with a traditional solvent-based process that is not effective on molecules covalently linked to the solid part of the plant.

Molecular Bioliquefaction® Technology was developed to overcome the limitations of traditional extraction technologies. Through a combination of different treatments, it is possible to recover all the different molecules that make up the plant phytocomplex, obtaining end products that are also highly bioavailable. In fact, this approach is inspired by the human digestive system, able through a sequence of different enzymatic processes to make all the energy and beneficial molecules contained in food bioavailable for our metabolism. The skin has no proper digestive system of its own, so the use of poorly or non-bioavailable plant-derived ingredients can greatly compromise the delivery of the desired effect of a cosmetic formulation.

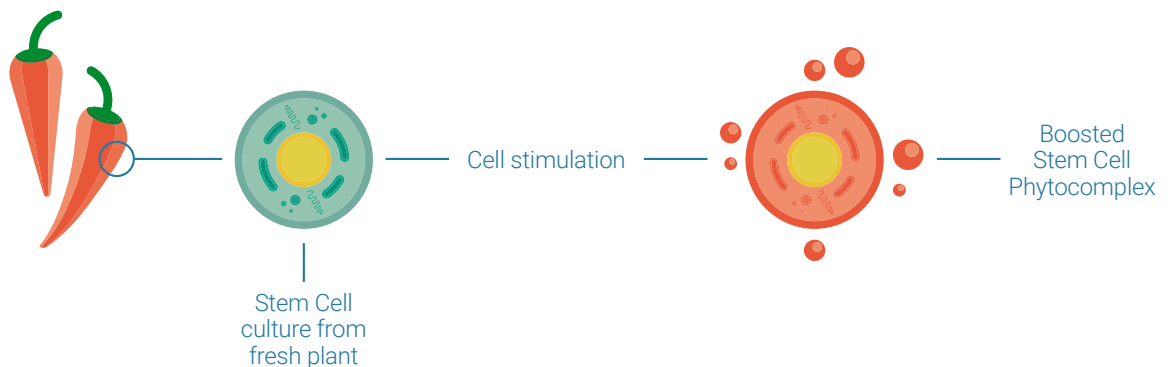




## STIMULATED STEM CELL

Stimulated Stem Cell Technology is an innovative process that pushes plant stem cells to overproduce bioactive compounds to further boost the efficacy of the plant stem cell-derived active ingredients.

Plant stem cells are undifferentiated cells that serve as the origin of plant vitality, since they maintain themselves while providing a steady supply of precursor cells to form differentiated tissues and organs in the plant. Being totipotent cells, virtually any chemical that the plant is able to synthesize in any tissue can be produced from these cultures. Thus plant stem cells are the ideal starting material of cell culture for phytochemical production, as cells are successfully mass cultured while maintaining quality. Furthermore, in a stem cell culture it is possible to perform what is called Stem Cell Stimulation. This process foresees the introduction in the growth medium of some selected natural stress able to force the plant stem cell to overproduce secondary metabolites of interest, obtaining not only a more rich but also a more concentrated phytocomplex.



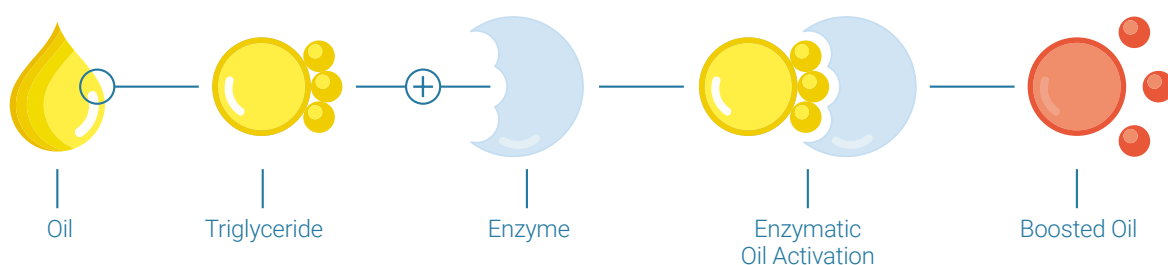


## ENZYMATIC ACTIVATION OF VEGETABLE OIL

The Enzymatic Activation of Vegetable Oil is a bio-catalytic process able to break up triglycerides into their constituents (fatty acids and glycerides), releasing all the energy entrapped in vegetable oil.

In nature, oils are one of the most efficient forms of energy and carbon storage and are possibly the first cosmetic ingredient ever used. Plants generally store their oil in seeds, where they accumulate as triglycerides during maturation. This reserve of energy is mobilised during the germination process that involves a number of factors, one of the main ones being the process of oil activation. To be suitable for energy purposes, oils must in fact undergo an enzymatically-controlled activation process, which transforms the triglycerides into smaller molecules releasing free fatty acids and glycerides, and these are the real fuel that the plant uses for germination.

As in plant germination, human cells are unable to directly uptake and metabolise triglycerides. When any cell in our body has a specific metabolic need connected to the triglycerides transported by plasma lipoproteins, these triglycerides must go through an activation process catalysed by specific enzymes. This activation process enables the released free fatty acids and glycerides to cross the cell membrane, by means of active and passive transport mechanisms, and to be used in the various metabolic pathways. Oils are used to “nourish” the skin but their main activity is only to repair and soften the outermost layers of it. Thanks to the Enzymatic Activation of Vegetable Oil, using specific enzymatic treatment mimicking the activation process that occurs in our body, the limitations on the bioavailability of the oils can be overcome and oils can become a real active ingredient.





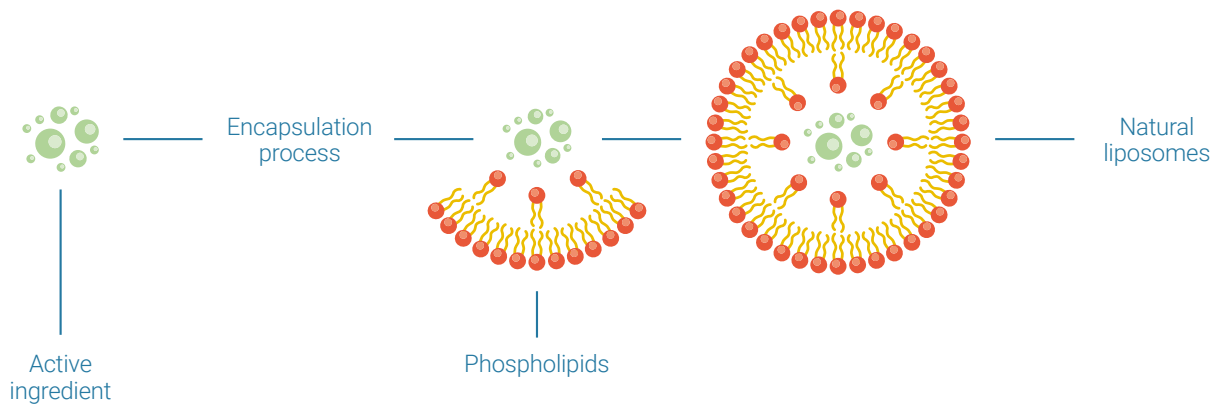
## NATURAL LIPOSOMES

Our Natural Liposomes are an efficient and completely naturally derived, COSMOS compliant delivery system that can be used to protect and enhance the effectiveness of cosmetic ingredients.

Natural Liposomes are sphere-shaped vesicles consisting of phospholipid bilayers. The chemical structure of phospholipids, in water environment, forces these molecules to rearrange in a tail-tail position creating the double layer with hydrophilic properties both on the inner and the outer surface. These liposomes can therefore be used to facilitate the penetration into the cell of water-soluble actives contained in the liposomes, but also of oil-soluble actives that can be included in the double layer structure.

The main constituent of our Natural Liposome is plant-derived phosphatidylcholine from non-GMO soy. Phosphatidylcholines are major components of biological membranes and this facilitates the delivery effect of our liposomes as they are more easily able to merge with skin cell membranes, releasing the active ingredient inside the cell.

Natural Liposomes can be easily loaded with different kinds of ingredients, offering our customers a broad choice of customization.





## HYPERFERMENTATION

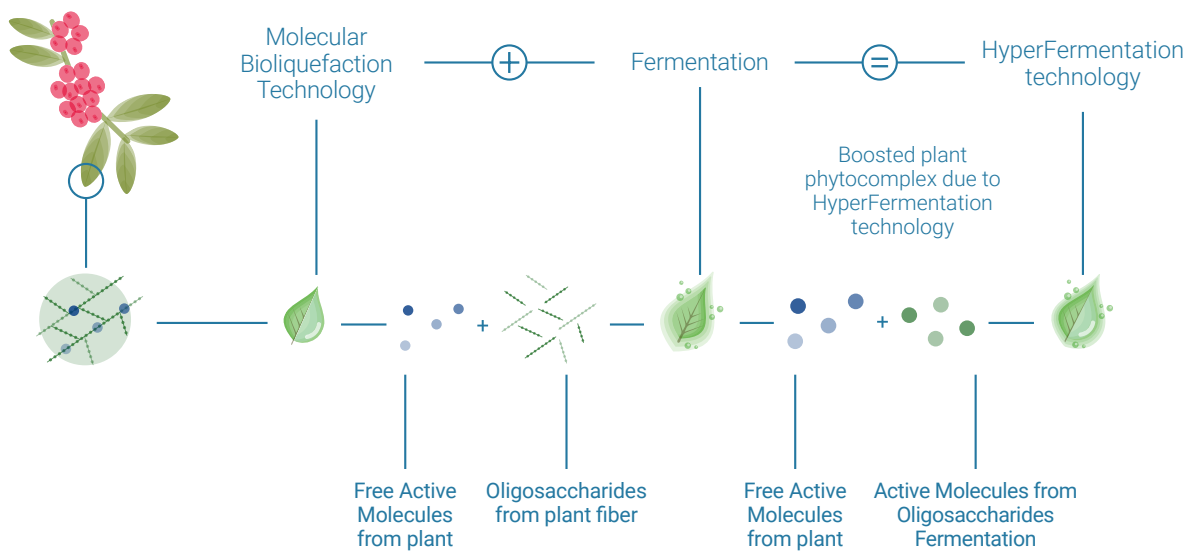
In the cosmetics raw materials sector, fermentation is a transformation process of great potential interest since it can exploit a micro-organism to produce innovative active ingredients.

For thousands of years, fermentation has provided many cultures with the means of transforming food, increasing its nutritional value, preservability and bioavailability. One of the most detailed agricultural tests from ancient times is Columella's *De Re Rustica* (On Rural Affairs, 65 AD), on farming and fermentation connected with wine-making: this work summarizes everything the Romans knew about agriculture.

This millennia-old know how, typical of the Mediterranean area, combined with the latest biotechnologies at our disposal, has made it possible to develop a new and important production process:

### **HYPERFERMENTATION TECHNOLOGY (Bioliqefaction + Fermentation)**

the phytocomplex naturally contained in the plant is reinforced thanks to fermentation, transforming the inert fibres into even more active ingredients.







## EXTRACTS

Plant extracts are liquid preparations obtained from fresh or dried medicinal plants by means of suitable physical extraction processes; these include the use of appropriate solvents and the employment of maceration or percolation, or other suitable procedures.

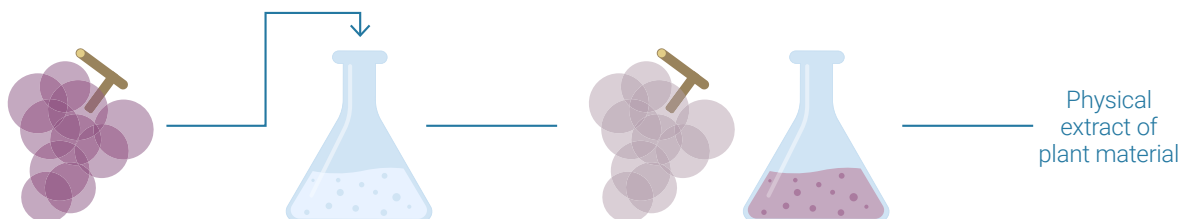
We can use various extraction solvents such as, for example, water, plant oils and plant glycerine.

Whatever technique is used, the production of any plant extract starts with selection of the medicinal substance, i.e. the part of the plant used for cosmetic purposes.

To ensure correct extraction of the substances, the plants must be ground to an appropriate degree of fragmentation, while the choice of solvent depends on the type of active ingredients to be extracted.

Three product lines were created with this technology:

- **ACTIVE WATER EXTRACTS** – water-based extracts
- **ACTIVE LIPO EXTRACTS** – oil-based extracts
- **PRESERVATIVE-FREE EXTRACTS** – preservative-free hydroglycerine-based extracts





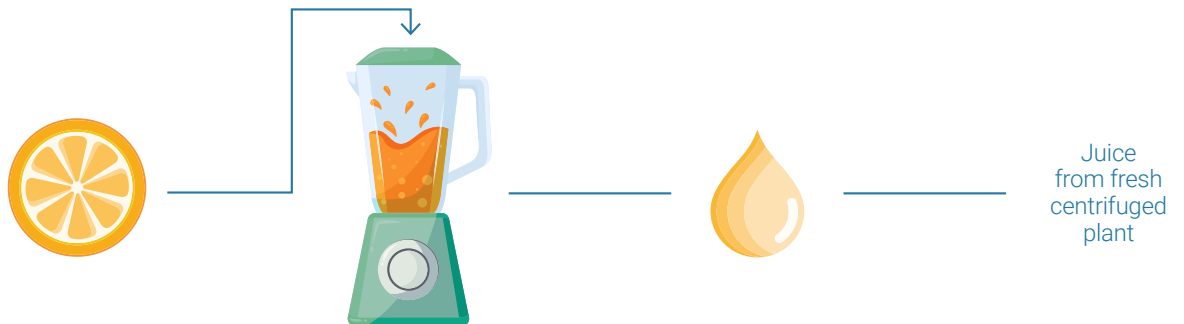
## CENTRIFUGED

The best fresh fruits and vegetables are selected and placed in a drum fitted with a series of metal blades that rotate at a speed that develops a centrifugal force able to break down the plant cells and thus release the juice they contain.

We use a non-continuous treatment, alternating brief rotation cycles with pauses to avoid heating the juice and potentially degrading the active fraction. The resulting centrifuged product is then filtered until it runs clear and preserved to ensure an appropriate shelf life.

The following product line was created with this technology:

- **ACTIVE JUICES**







# ACTIVE INGREDIENTS

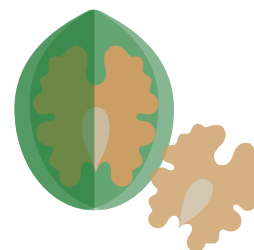
Inspired by plant intelligence,  
obtained through cutting edge nature  
inspired technologies and supported  
by state of the art substantiation data,  
these are our active ingredients.



GRAPE



ROCKET SALAD



WALNUT

# — 3HC-HAIR STIMULATION COMPLEX —

## — TURNS ON THE DERMAL PAPILLA HAIR ENGINE —



COSMOS  
APPROVED

### PRODUCT DESCRIPTION

3HC-Hair Stimulation Complex is a mix of plant-derived active ingredients able to boost the turnover of the Human Follicle Dermal Papilla Cells (HFDPC), a reservoir of multipotent stem cells regulating hair follicle development which can be considered the real engine of our hair.

3HC-Hair Stimulation Complex consists of green grape plant stem cell able to successfully influence microcirculation, a green walnut derived product acting as a powerful direct antioxidant and a rocket salad based product able to stimulate the natural synthesis of glutathione, an endogenous antioxidant that also protects DNA and detoxifies cells.

*In vitro* tests proved that the ingredients of 3HC-Hair Stimulation Complex are able to work at different levels on HFDPC metabolism inducing synergistic long-term stimulation effects on cell growth.

3HC-Hair Stimulation Complex was used in specific clinical trial showing the product is able to increase the hair's lifespan and reduce hair loss in just 3 weeks.



T0

T120 DAYS

Phototrichogram before and after treatment with 3HC Hair Stimulation Complex 3% w/w

### BENEFITS

- **Stimulates the Human Follicle Dermal Papilla Cells** (+70% *in vitro* tests)
- **Reinforces hair in just 3 weeks** (-21.3%, -38% in 8 weeks *in vivo* test)
- **Reduces hair loss in just 3 weeks** (-9.7%, -13.1% in 8 weeks *in vivo* test)
- **Prolongs hair lifespan** (+32.4% *in vivo* test)
- **Increases the number of growing hair** (+10.4% *in vivo* test)

### TECHNICAL INFORMATION

**INCI:** aqua, *Vitis vinifera* fruit meristem cell culture, hydrolyzed *Eruca sativa* leaf, hydrolyzed walnut extract, citric acid, sodium benzoate, potassium sorbate.

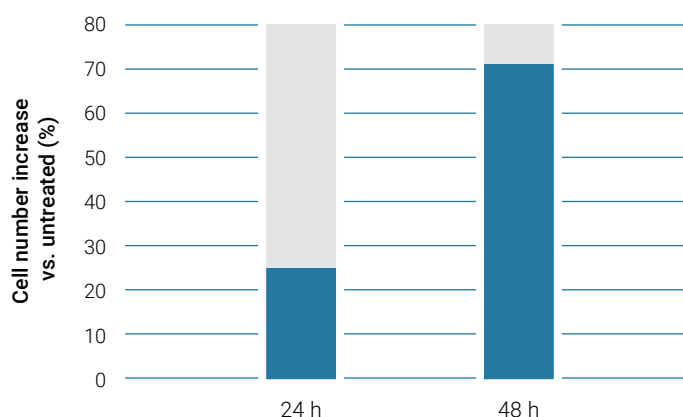
**PLANTS USED:** rocket salad leaves freshly harvested in Italy, green walnuts fruit from the Veneto region, Italy, stem cell culture obtained from green unripened grapes from the Emilia-Romagna region, Italy.

**TECHNOLOGY:** Bioliquefaction Technology, Stimulated Stem Cell Technology.

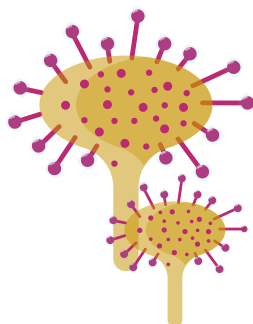
**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** also available in China compliant version.



Human Follicle Dermal Papilla Cells number increase after treatment with 3HC Hair Stimulation Complex 1% w/w



SUNDEW

# ADIPO-TRAP

A CARNIVOROUS PLANT TO RESHAPE THE BODY

SKIN

COSMOS  
APPROVED

## PRODUCT DESCRIPTION

Carnivorous plants are rare and fascinating plants that, able to colonise very poor soils, developed their ability to trap and digest their prey in order to have an alternate source of nutrients. These special conditions forced the metabolism of these plants to produce a very unique phytocomplex.

ADIPO-TRAP is produced using sundew, a plant characterized by glandular tentacles, topped with sticky secretions, that cover its leaves/trap. The sundew is able to move its tentacles in response to contact with prey. Sundew phytocomplex is able to modulate adipocyte metabolism acting as a slimming, re-shaping and anti-cellulite active ingredient.

During *in vitro* tests performed using preadipocyte and adipocyte, ADIPO-TRAP was able to prevent fat accumulation and to reduce the adipocyte size, showing an efficient lipolysis effect.

In a within-patient clinical trial, ADIPO-TRAP was shown to be able to efficiently act as a slimming and reshaping active ingredient and to start reducing cellulite and cellulite-related pain just after 2 weeks.

## BENEFITS

- **Prevents fat accumulation** (*in vitro* tests)
- **Lipolytic effect** (*in vitro* tests)
- **Slimming, re-shaping, body contouring** (-1.6 cm in 4 weeks *in vivo* test)
- **Reduce cellulite** (-5.5% *in vivo* test)
- **Reduce cellulite-related pain** (-23.5% *in vivo* test)

## TECHNICAL INFORMATION

**INCI:** glycerin, hydrolyzed *Drosera ramentacea* leaf, citric acid, sodium benzoate, potassium sorbate.

**PLANT USED:** sundew (*Drosera ramentacea*) leaves from Madagascar.

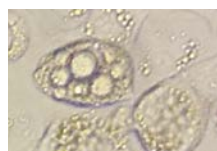
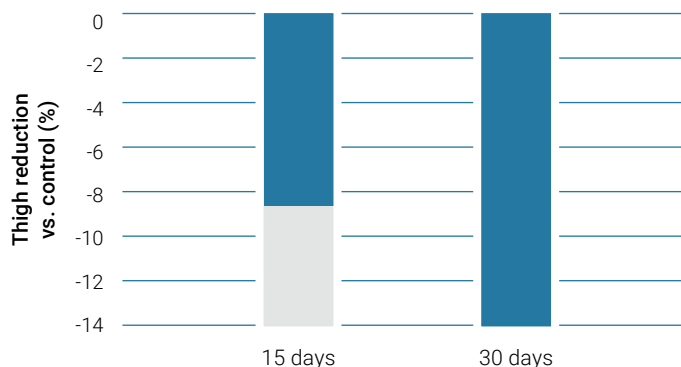
**TECHNOLOGY:** Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

**ORGANIC STATUS:** COSMOS approved.

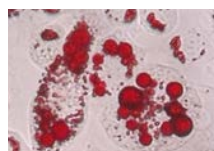
**CHINA STATUS:** also available in China compliant version.

Reduction of thigh circumference due to a 3% w/w ADIPO-TRAP containing gel vs. control formulation



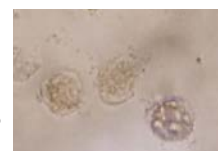
T14

←  
UNTREATED



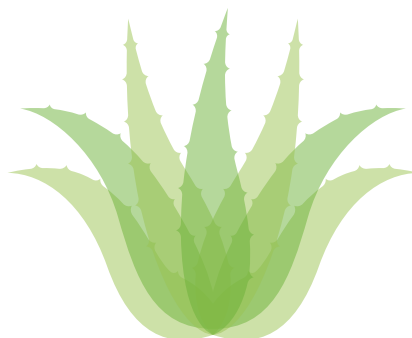
T7

→  
ADIPO-TRAP



T14

Lipolytic effect on adipocytes after incubation for 7 days with and without ADIPO-TRAP



ALOE VERA

# ALOFERM HF

## BOOSTED ALOE THROUGH FERMENTATION

SKIN

HAIR

COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

Aloe vera is one of the oldest medicinal plants, used throughout the world thanks to its properties usually attributed to the phenols and polysaccharides contained in the gel of its leaves. The aloe leaves also contain a portion of polysaccharide fibers, inert from a cosmetic point of view, which can be converted into new active ingredients thanks to a process of HyperFermentation.

ALOFERM HF therefore contains a phytocomplex that is reinforced thanks to the combined action of enzymes and *Saccharomyces cerevisiae*. This process boosts the cosmetic action of aloe both at metabolic and skin level.

ALOFERM HF boosts keratinocytes metabolism and stimulates the wound healing process. In fibroblasts promotes the collagen synthesis, inhibits the release of metalloproteinases.

ALOFERM HF is much more effective in moisturizing the skin than aloe gel alone. The product acts both in the short and long term, moisturizing even the deepest layers of the skin, reducing scaliness and improving firmness.

ALOFERM HF has also been shown to be a valid ingredient thanks to its efficacy in personal hygiene products, since it gives a feeling of relief, freshness and comfort.

In hair care treatments, whether leave-on or rinse-off, studies have demonstrated that ALOFERM HF helps hair to retain moisture.

**ALOFERM HF:**  
effectiveness in skin care applications

### BENEFITS

- **Boosted phytocomplex through fermentation**
- **Boosts keratinocyte metabolism** (*in vitro test*)
- **Protects collagen and boosts its synthesis** (*in vitro test*)
- **Promotes wound healing** (*in vitro test*)
- **Five times more effective than standard aloe in moisturizing skin** (*in vivo test*)
- **Improves short-term, long-term and deep moisturization** (*in vivo test*)
- **Reduces skin scaliness** (-16% in 15 days, *in vivo test*)
- **Increases skin firmness** (+33% in 30 days, *in vivo test*)
- **Personal hygiene: gives a feeling of relief, freshness and comfort** (*clinical tests*)
- **Helps hair to retain moisture** (+26% rinse-off, +54% leave-on, *ex vivo test*)

### TECHNICAL INFORMATION

**INCI:** aloe barbadensis leaf juice, saccharomyces ferment lysate filtrate, citric acid, sodium benzoate, potassium sorbate.

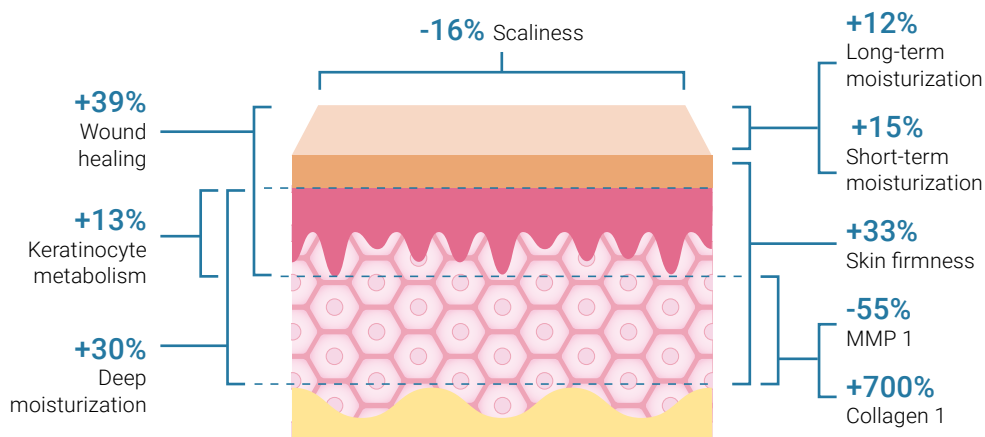
**PLANT USED:** organic aloe leaves.

**TECHNOLOGY:** HyperFermentation Technology.

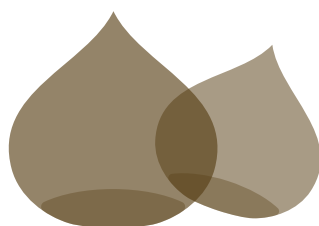
**SUGGESTED CONCENTRATION OF USE:** 3% w/w skin care and hair care.

**ORGANIC STATUS:** COSMOS certified.

**CHINA STATUS:** the product is China listed.







CHESTNUT

# AQ-SAVE

## ORGANIC CHESTNUTS TO REPAIR AND MOISTURIZE HAIR



COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

AQ-SAVE is an active ingredient specifically developed for hair care obtained from Italian organic certified chestnuts. Bespoke enzymatic treatments have been developed to reach a dimensional distribution of chestnuts' phytocomplex molecules allowing for successful interactions with hair surface.

The specific composition of AQ-SAVE is able to coat hair each hair strand, repairing damaged hair and closing hair cuticles. This repairing and filming process is also very important to avoid hair water loss and therefore keep hair healthier and more moisturized.

AQ-SAVE allows to better retain hair moisture even when hair is severely distressed by hot irons, and straightening, by preventing water loss on both healthy and distressed hair.

### BENEFITS

- **Repairs damaged hair** (*ex vivo* test)
- **Keeps hair moisturized and healthy** (+30% *ex vivo* test)
- **Protects hair from stressful treatments** (+30% *ex vivo* test)

### TECHNICAL INFORMATION

**INCI:** hydrolyzed chestnut extract, citric acid, sodium benzoate, potassium sorbate.

**PLANT USED:** Italian organic certified chestnuts.

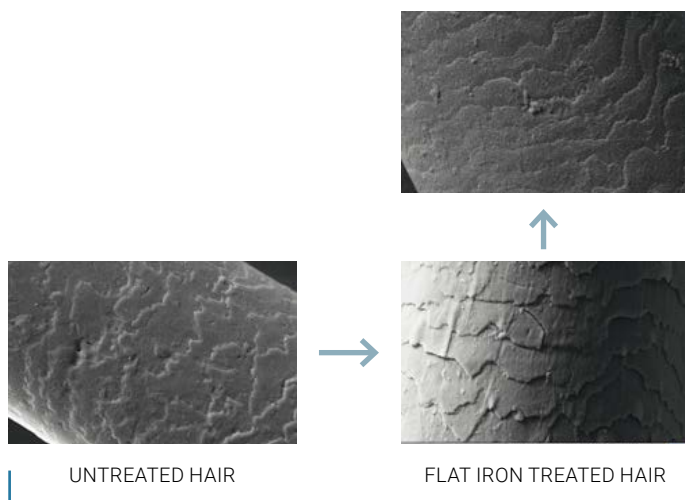
**TECHNOLOGY:** Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 1% w/w.

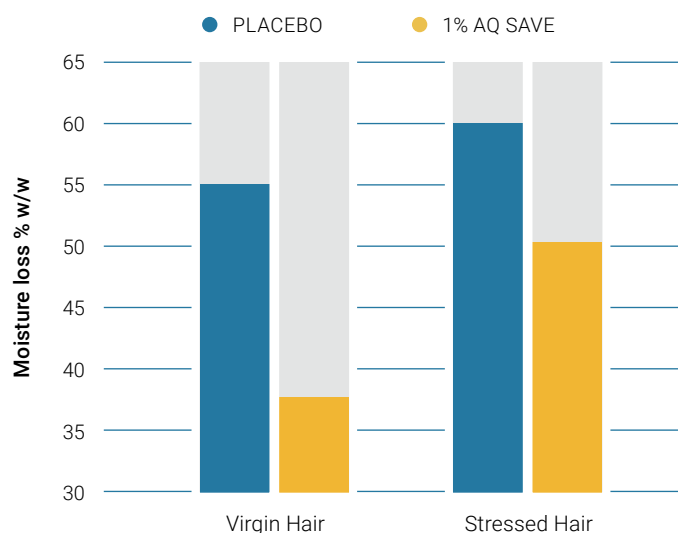
**ORGANIC STATUS:** COSMOS certified.

**CHINA STATUS:** also available in China compliant version.

AQ-SAVE 1%



Repairing effect of AQ-Save 1% w/w on damaged hair



Moisture loss preventing effect on hair treated with AQ save 1% w/w before flat iron straightening



OATS

# AVENOFERM HF

## OATS BENEFITS BOOSTED BY FERMENTATION

SKIN

COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

Oats have been used successfully for millennia due to moisturizing and soothing properties. The Ancient Romans were used to add oats to thermal water to nourish the skin, treat chapping and irritation. Cleopatra also used oat flour mixed with warm milk as beauty treatment.

Oats are rich in proteins with a high content of lysine and are as an excellent source of soluble fiber and beta-glucans with prebiotic activities. There are also several antioxidant compounds having exceptional calming and soothing properties.

AVENOFERM HF is an active ingredient based on oat phitocomplex boosted through Phenbiox's exclusive HyperFermentation Technology, process that transforms oat's oligosaccharides into a post-biotic complex with high cosmetic efficacy by enhancing the antioxidants and amino acids content.

AVENOFERM HF can act as soothing agent reducing inflammation by reducing the Interleukin 1-alpha production.

In skin care application AVENOFERM HF proved to be respectful of skin microbiota not reducing its biodiversity but at the same time inducing a positive modulation that reduces the content of *P. acnes*, preventing acne breakouts.

AVENOFERM HF is also able to keep skin protected, preventing skin dryness caused by surfactants.

### BENEFITS

- **Reduces interleukins release** (-26% *in vitro* test)
- **Positively modulates skin microbiota inhibiting *P. acnes*** (*in vivo* test)
- **Prevents skin dryness caused by surfactants** (*in vivo* test)

### TECHNICAL INFORMATION

**INCI:** aqua, avena sativa leaf extract, saccharomyces ferment lysate filtrate, citric acid, sodium benzoate, potassium sorbate

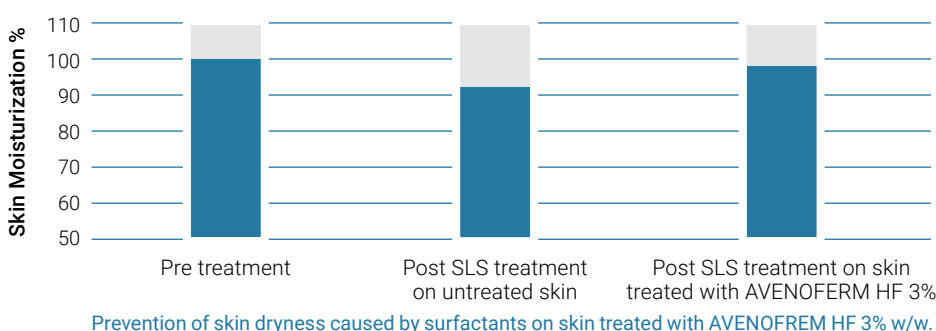
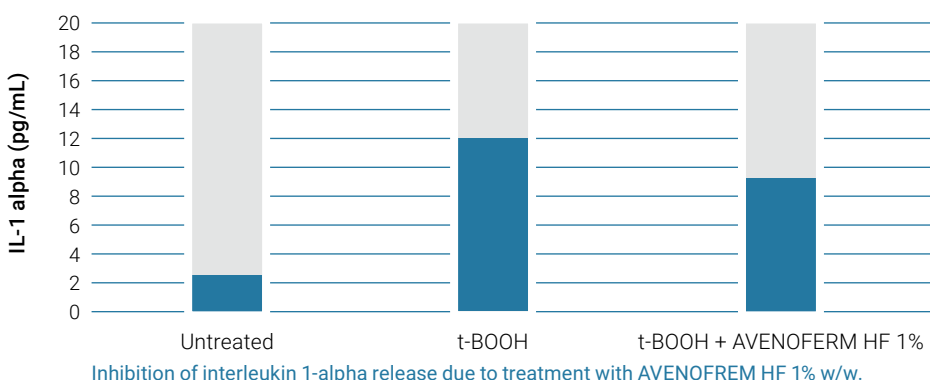
**PLANT USED:** Organic Italian Oat Apennine Mountains

**TECHNOLOGY:** Hyperfermentation Technology

**SUGGESTED CONCENTRATION OF USE:** 3% w/w

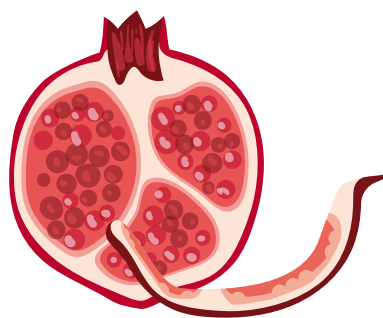
**ORGANIC STATUS:** COSMOS certified

**CHINA STATUS:** product is China listed





HAZELNUT



POMEGRANATE

## BODYFERM HF

### HAZELNUT AND POMEGRANATE SKINS FROM UP-CYCLING TO RESHAPE THE BODY



COSMETIC INGREDIENT FROM  
**UPCYCLING**

COSMOS  
APPROVED

#### PRODUCT DESCRIPTION

BodyFerm HF is an active ingredient obtained from the up-cycling of two by-products from Italian productions of excellence: hazelnut skins from Piedmont and Emilian pomegranate peels.

These skins are by-products from the food sector but contain phytocomplexes that are very rich in active ingredients, part of the defensive barriers protecting the fruit.

Hazelnut and pomegranate skins have high concentrations of different kind of phenolics able to perform antioxidant, anti-inflammatory and microcirculation-promoting activities.

The two plant phytocomplexes are boosted through the exclusive Hyper-Fermentation technology able to transform the inert oligosaccharides into a post-biotic complex, with an increased content of antioxidants and amino acids, obtaining BodyFerm HF.

BodyFerm HF efficiently acts as body tightening and slimming active on arms, thighs and abdomen. It also has a breast firming action delivering total body reshaping effect in only 30 days.

#### BENEFITS

- **Reduces circumference on thighs, abdomen and arms** (-0,9 cm, -1,3 cm, -0,4 cm *in vivo* test)
- **Reduces subcutaneous fat on thighs, abdomen and arms** (-4,1%, -5,6%, -5,5% *in vivo* test)
- **Increases skin firmness** (+12%, *in vivo* test)
- **Reactivates microcirculations** (+11% *in vivo* test)
- **Breast firming effect** (according to 70% of volunteers, *in vivo* self-assessment under medical supervision)

#### TECHNICAL INFORMATION

**INCI:** glycerin, aqua, punica granatum pericarp extract, corylus avellana seed extract, saccharomyces ferment lysate filtrate, citric acid.

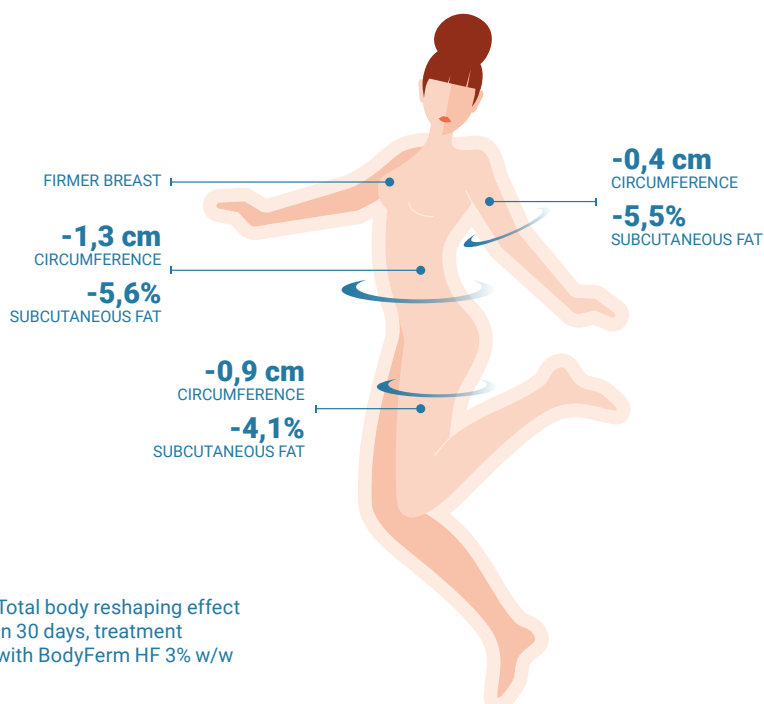
**PLANT USED:** hazelnut skins from Piedmont, pomegranate skins from Emilia-Romagna region.

**TECHNOLOGY:** Hyperfermentation technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

**ORGANIC STATUS:** COSMOS approved.

**STATUS CINA:** the product is China listed.



Total body reshaping effect  
in 30 days, treatment  
with BodyFerm HF 3% w/w



HEMP

# CANNABIOT

## HEMP FOR SKIN AND MICROBIOTA WELLNESS



COSMOS  
APPROVED

COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

Hemp is a well-known effective remedy against dehydrated and dry skin as well as being a potent anti-inflammatory and it is becoming one of the must-have ingredients in the cosmetics sector also for marketing purposes.

Cannabiot is a hemp derived active ingredients produced from seeds treated with our exclusive Bioliquefaction Technology in order to release the complete phytocomplex of the plant.

Cannabiot is able to positively modulate the microbiota of healthy skin and helps skin and skin microbiota to recover from irritations and biodiversity depletion.

Cannabiot is a fast acting soothing agent able to help the skin to recover from erythema and to reduce the trans epidermal water loss.

Cannabiot is a hydrating agent able to increase skin moisturisation and to reduce skin scanlines. The product can also remarkably increase skin elasticity and reduce skin roughness.

### BENEFITS

- **Positively modulates skin microbiota** (*in vivo* test)
- **Promotes the recovery of skin microbiota after insult** (*in vivo* test)
- **Soothes irritated skin** (*in vivo* test)
- **Reduces TEWL of irritated skin** (*in vivo* test)
- **Promotes skin hydration** (+ 15.4% *in vivo* test)
- **Reduces skin scaliness** (- 22.7% *in vivo* test)
- **Increases skin elasticity** (+ 49.7% *in vivo* test)
- **Reduces skin roughness** (- 7.7% *in vivo* test)

### TECHNICAL INFORMATION

**INCI:** glycerin, *Cannabis sativa* seed extract, citric acid.

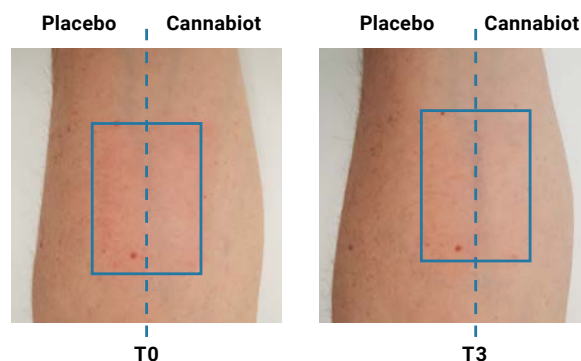
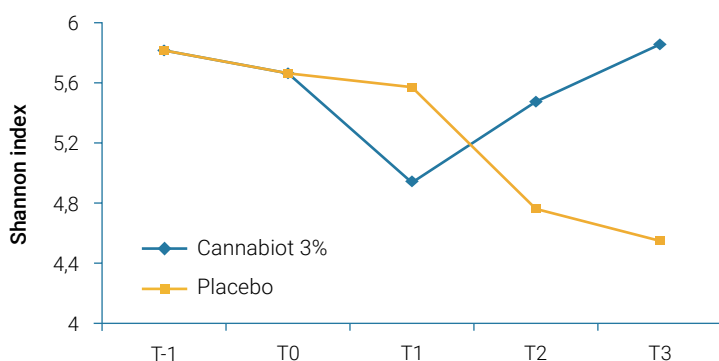
**PLANT USED:** hemp seeds (cannabinoids <2ppm).

**TECHNOLOGY:** Bioliquefaction Technology.

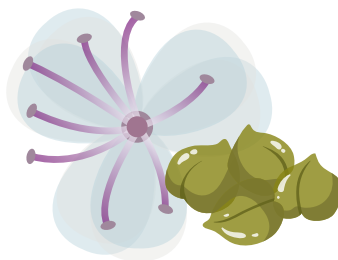
**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

**ORGANIC STATUS:** COSMOS approved / COSMOS certified.

**CHINA STATUS:** not allowed in China.



Skin microbiota biodiversity (Shannon Index) recovery promoted by Cannabiot 3% w/w after a pro inflammatory insult (SLS treatment).



CAPER

# CAPERACTIVE

AN ANTIAGING FLOWER BUD FROM  
A VOLCANIC ISLAND FOR SKIN GLOW



COSMOS  
APPROVED

## PRODUCT DESCRIPTION

In the heart of the Mediterranean, off the coast of Sicily, lies Pantelleria, a volcanic island known as the "Black Pearl". From this dark lava land lashed by the sea, the sun and the wind, come the capers, flower buds that contain the essence of the island, used to produce CAPERACTIVE.

Already known by the Greeks and Latins for their organoleptic and beneficial properties, these buds are picked by hand just before blooming to keep their properties unaltered. Pantelleria capers are rich in mineral salts from the lava soil, micronutrients and antioxidants such as vitamins and phenols.

Thanks to hyperfermentation technology, all the properties of these flower buds are released and enhanced to obtain a highly effective cosmetic active ingredient for skin care products.

CAPERACTIVE is able to effectively hydrate the skin and improve its appearance by reducing flaking and improving skin tone and elasticity. Thanks to its CAPERACTIVE properties it makes the skin more radiant and bright.

## BENEFITS

- **Promotes skin hydration** (+10% in 1 hour, +11% in 14 days, +11% in 28 days *in vivo* test)
- **Increases skin firmness** (+40% in 1 hour, +24% in 28 days *in vivo* test)
- **Increases skin tone** (+13.5% in 14 days, +13.5% in 28 days *in vivo* test)
- **Reduces skin scaliness** (-15% in 28 days *in vivo* test)
- **Increases skin brightness** (+10% in 14 days, +19.5% in 28 days *in vivo* test)

## TECHNICAL INFORMATION

**INCI:** glycerin, water, Capparis spinosa fruit extract, Saccharomyces ferment lysate filtrate, citric acid.

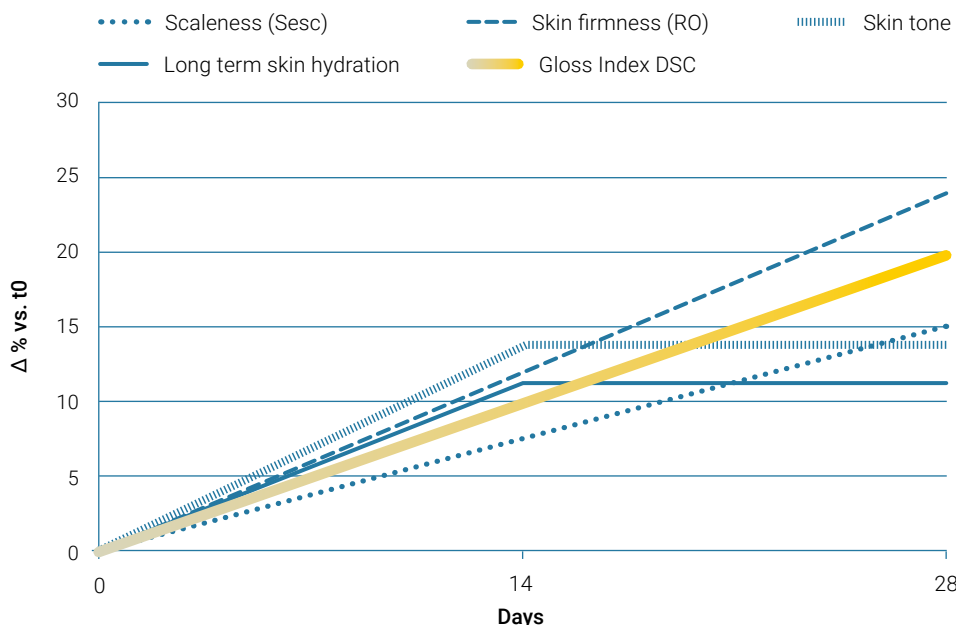
**PLANT USED:** capers, flower buds from Pantelleria.

**TECHNOLOGY:** Hyperfermentation technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w skin care.

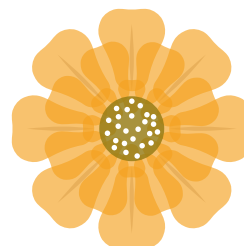
**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** the product is China listed.





ROCKET SALAD



PRICKLY PEAR FLOWER

# COUPERINE

REDUCES COUPEROSE FROM THE FIRST WEEK

SKIN

COSMOS  
APPROVED

## PRODUCT DESCRIPTION

COUPERINE is a mix of bioliquified rocket salad leaves and prickly pear flowers able to help very sensitive skin to be less prone to develop couperose and to lessen it when already present.

Rocket salad contains isothiocyanates able to boost the synthesis of the tripeptide glutathione, the only endogenous antioxidant of our body. Glutathione participates directly in the neutralization of free radicals and maintains vitamins C and E in their active forms. Glutathione plays a prominent role in DNA protection, in the detoxification processes and in contrasting the inflammatory processes often related to radical presence.

Prickly pear flowers have been used in traditional medicine and in recent years the antioxidants and polysaccharides contained in it have been proven to be able to protect both large and small blood vessels from oxidative damage. They can also mitigate micro-vessel damage and maintain micro-capillary integrity by stabilizing capillary walls.

The combination of endogenous and exogenous antioxidants and protective molecules, as well as the soothing and conditioning effects of the mix of molecules contained in COUPERINE allow to effectively reduce couperose from the first week of application.

## BENEFITS

- **Boosts endogenous and exogenous antioxidant defences of skin** (*in vitro* tests)
- **Reduces redness (-13%), tightness (-8%) and stinging sensation (-9.1%) on skin** (*in vivo* test)
- **Reduces couperose from the first week** (-10.4% *in vivo* test)

## TECHNICAL INFORMATION

**INCI:** hydrolyzed *Eruca sativa* Leaf, hydrolyzed *Opuntia ficus-indica* flower extract, citric acid, sodium benzoate, potassium sorbate.

**PLANTS USED:** rocket salad leaves (*Eruca sativa*) freshly harvested in Italy and Mediterranean prickly pear flowers (*Opuntia ficus-indica*).

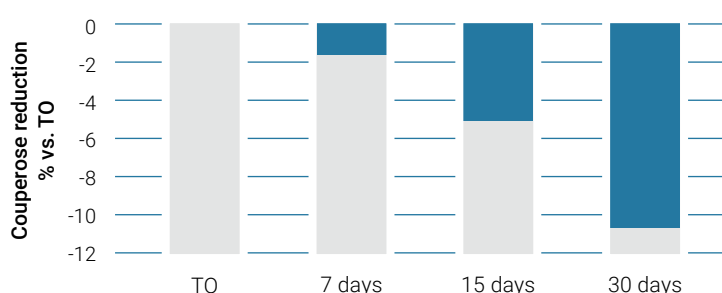
**TECHNOLOGY:** Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

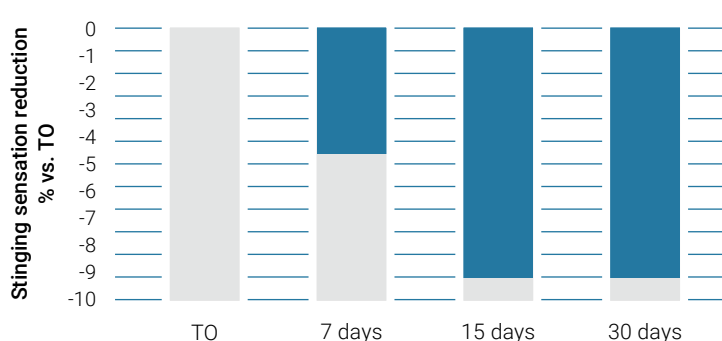
**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** also available in China compliant version.

Couperose reduction after a treatment with Couperine 3% w/w



Stinging sensation reduction after a treatment with Couperine 3% w/w





WHEAT BRAN

# CRUOX®

## ARABINOXYLANS TO PLUMP UP WRINKLES FROM THE INSIDE



COSMETIC INGREDIENT FROM  
**UPCYCLING**

COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

The settling in of wrinkles and expression lines is due to loss of skin firmness and elasticity generally caused by aging or photo-aging in healthy people. In mature skin there is a loss of efficiency of the fibroblast metabolism which produces micro-fibrils at a lower rate.

CRUOX® is bio-liquefied wheat bran that acts on wrinkles. Due to its complex and highly bio-available chemistry it reactivates the micro-fibril synthesis that internally plumps up wrinkles. The biocatalysts used cut polymeric structures at a molecular level, releasing a high content of arabinoxylans and biophenols, mostly ferulic acid, in the water phase, that are generally not bioavailable.

CRUOX® is able to increase skin elasticity working on the lower layers of the skin, thanks to the activation of fibril synthesis. This has also a positive effect on skin appearance causing wrinkles to be significantly reduced.

### BENEFITS

- **Effectively increases biological elasticity in skin** (+9% *in vivo* test)
- **Drastically increases viscoelasticity in skin** (+33% *in vivo* test)
- **Reduces wrinkles** (-21% *in vivo* test)

### TECHNICAL INFORMATION

**INCI:** hydrolyzed wheat bran, citric acid, sodium benzoate, potassium sorbate.

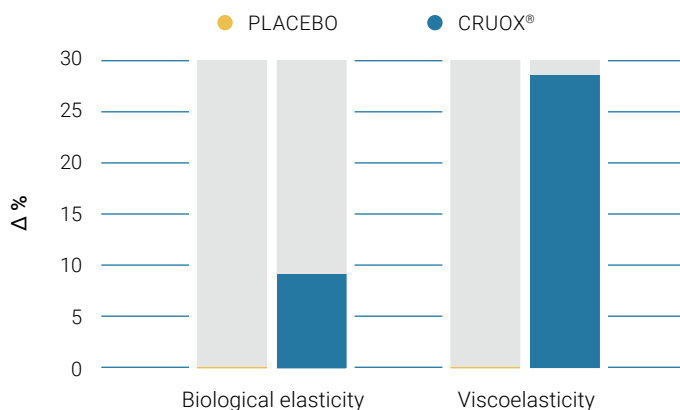
**PLANT USED:** organic wheat bran from the Po river valley.

**TECHNOLOGY:** Bioliquefaction Technology.

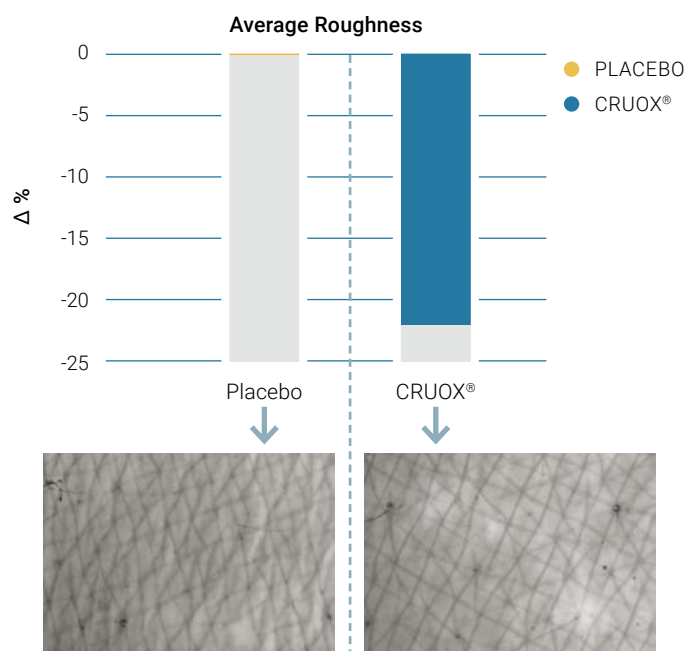
**SUGGESTED CONCENTRATION OF USE:** 3-5% w/w.

**ORGANIC STATUS:** COSMOS certified.

**CHINA STATUS:** also available in China compliant version.



Skin Elasticity increased due to the treatment with Cruox® 5% w/w



Wrinkle reduction due to the treatment with Cruox® 5% w/w





LIQUORICE ROOT



NETTLE LEAF



OAK BARK

# FERMENTHAIR HF

## LONG-LASTING HAIR HEALTH PROMOTION



COSMOS  
APPROVED

### PRODUCT DESCRIPTION

FermentHair HF is a blend of Italian plants used in different traditional medicines to reduce hair loss and stimulate hair growth. The phytocomplexes of nettle, liquorice and oak bark have been broadly studied for several beneficial properties such as high antioxidant and anti-inflammatory capacity, ability to modulate testosterone and DHT, stimulation of microcirculation, hair density and thickness.

The mix of plant of FermentHair HF has been processed through our exclusive HyperFermentation process in order to fully release the plant phytocomplexes and to boost it through the post biotic complex produced by yeast.

FermentHair HF reduces hair fall and telogen hair count delivering a prompt and effective anti-hair loss effect. FermentHair HF proved also to be able to increase the total hair count increasing the hair density. The improvement of hair conditions remains evident even after stopping the treatment confirming a long-lasting effect.

### BENEFITS

- **Reduces hair loss** (Pull Test -9% in 30 days, -35% in 60 days *in vivo* test)
- **Increases hair lifespan** (Telogen hair count -8% in 60 days *in vivo* test)
- **Stimulates hair growth** (Anagen hair count +3,6% in 30, days +18% 60 days *in vivo* test)
- **Promotes hair density** (Total hair count +3,1% in 30 days, +10,3% 60 days *in vivo* test)
- **Long lasting effect even after treatment stop** (*in vivo* test)

### TECHNICAL INFORMATION

**INCI:** aqua/water, urtica dioica leaf extract, glycyrrhiza glabra root extract, quercus robur bark extract, saccharomyces ferment lysate filtrate, citric acid, sodium benzoate, potassium sorbate.

**PLANTS USED:** nettle leaf and oak bark from Emilia-Romagna region, liquorice root from Calabria region.

**TECHNOLOGY:** Hyperfermentation Technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

**ORGANIC STATUS:** COSMOS approved

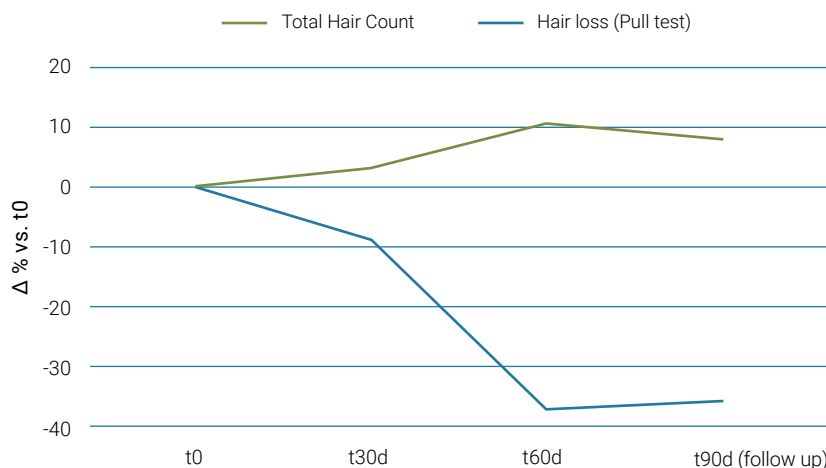
**CHINA STATUS:** product is China listed.



T0

T60 DAYS

Phototrichogram of a 46-year-old male subject with moderate telogen effluvium (pictures at time 0 and 60 days)



Anti-hair loss effect/hair growth promotion of a scalp treatment with FermentHair HF 3% w/w at day 30 and 60 and 30 days after stopping the treatment (follow up)



RICE

# FERMENTED RICE WATER

## ANCIENT HAIR BEAUTY SECRET



COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

Nestled in the mountains of southern China is a village called Huangluo where women are famous all over the world for their long black hair that can exceed two meters in length and remains black, healthy and shiny, even in old age.

The secret of Yao women's hair would seem to be due to the ancient beauty tradition that involves the use of a self-produced shampoo based on fermented rice water. Phenbiox has scientifically investigated the advantages that fermentation brings to rice water by using our exclusive HyperFermentation technology.

The HyperFermentation technology allows the mono/oligosaccharides to be converted into a highly effective post-biotic complex including antioxidants, amino acids, proteins. Hence, the secret of the effectiveness of Phenbiox's Fermented Rice Water is revealed.

Phenbiox's FERMENTED RICE WATER was tested for its ability to prevent hair moisture loss, providing additional moisturisation with excellent results in both leave on and rinse off conditions.

### BENEFITS

- **Boosted phytocomplex through fermentation**
- **Post-Biotic concept**
- **Helps hair to retain moisture +30% rinse off**
- **Helps hair to retain moisture +60% leave on**
- **Promotes skin hydration (+18.0% *in vivo* test)**
- **Increases skin elasticity (+11.5% *in vivo* test)**

### TECHNICAL INFORMATION

**INCI NAME:** Aqua, Oryza Sativa Extract, Saccharomyces Ferment Lysate Filtrate, Citric Acid, Sodium Benzoate, Potassium Sorbate

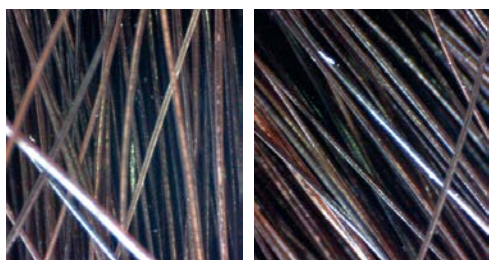
**PLANT USED:** Organic rice from Piedmont

**TECHNOLOGY:** HyperFermentation Technology

**SUGGESTED CONCENTRATION OF USE:** 3% w/w

**ORGANIC STATUS:** COSMOS certified

**CHINA STATUS:** the product is China listed

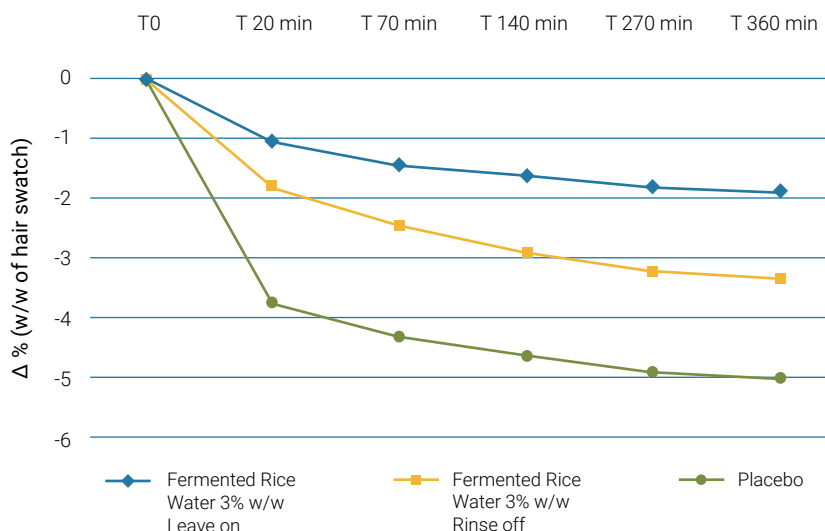


Placebo

Fermented Rice Water  
3% W/W

Comparison of hair appearance after leave on treatment

### Hair moisture loss





GRAPE

## G-CELL

### STIMULATED GREEN GRAPE STEM CELLS FOR LONG TERM ANTI-RADICAL PROTECTION

SKIN

COSMOS  
APPROVED

#### PRODUCT DESCRIPTION

Grapes are well known for the effective antioxidant phytochemical complex that they are able to produce. Green unripened grapes were collected, as these young tissues are rich in highly viable cells, and used to obtain the stem cell culture used to produce G-Cell.

During the stem cells fermentation process we have been inducing the overexpression of interesting active molecules such as polyphenols and stilbenes in glycosylated form. These glycosylated molecules are very stable and highly bio-available.

G-Cell is an effective antioxidant ingredient able to efficiently counteract free-radicals and to also retain this property in finished cosmetic products.

*In vivo* G-Cell is able to drastically rise the antioxidant capacity of skin delivering an efficient protection against free-radical aggressions. G-Cell offers long-lasting skin protection active for over 6 hours.

#### BENEFITS

- **Rich in highly stable, bioavailable and effective antioxidants** (*in vitro* tests)
- **Drastically raises the antioxidant defences of the skin** (+124% *in vivo* test)
- **Delivers long-lasting protection** (over 6 hours *in vivo* test)

#### TECHNICAL INFORMATION

**INCI:** aqua, *Vitis vinifera* fruit meristem cell culture, citric acid, sodium benzoate, potassium sorbate.

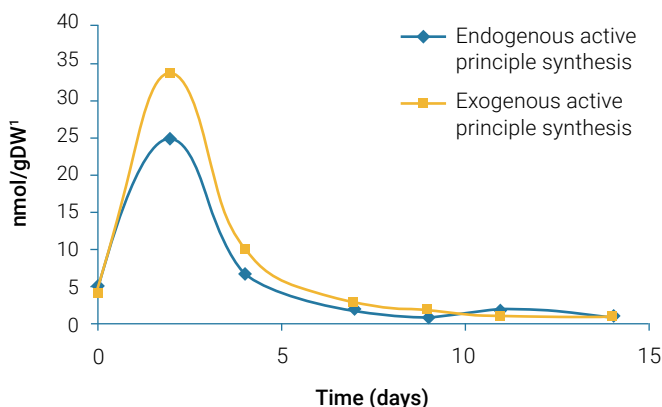
**PLANT USED:** stem cell culture obtained by green unripened grapes from the Emilia-Romagna region, Italy.

**TECHNOLOGY:** Stimulated Stem Cell Technology.

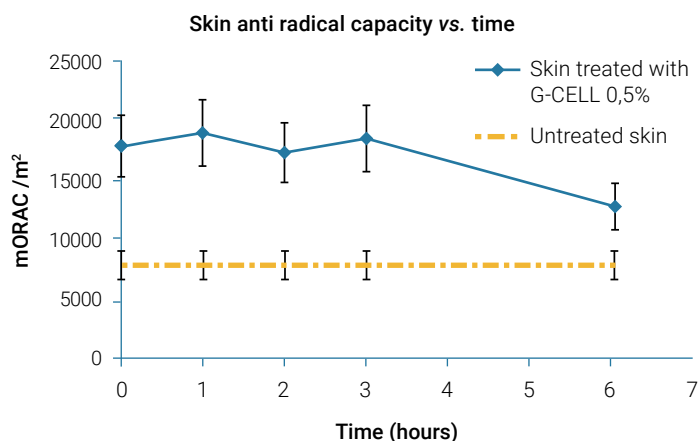
**SUGGESTED CONCENTRATION OF USE:** 0.5% w/w.

**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** also available in China compliant version.



Synthesis of endogenous and exogenous phenolics in grape meristem cell culture



Antiradical capacity of skin after treatment with G-Cell 0,5% w/w



ROCKET SALAD

## GSH-DEFENSE

### ROCKET SALAD BOOSTS ENDOGENOUS GSH TRIPEPTIDE TO STRENGTHEN SKIN DEFENSIVE SYSTEM

SKIN

COSMOS  
APPROVED

#### PRODUCT DESCRIPTION

Rocket salad (arugula) is one of the so called "healthy foods". When we eat it, the plant is able to release isothiocyanates that help our cells strengthen the phase II defence system in our body. Glutathione (GSH) is a tripeptide, one of the key molecule of this defensive system, and is the only antioxidant our cells are able to produce by themselves. GSH participates directly in the neutralization of free radicals and regenerates vitamins C and E keeping them in their active forms. GSH also plays a prominent role in DNA protection, in the detoxification processes and in contrasting the inflammatory processes.

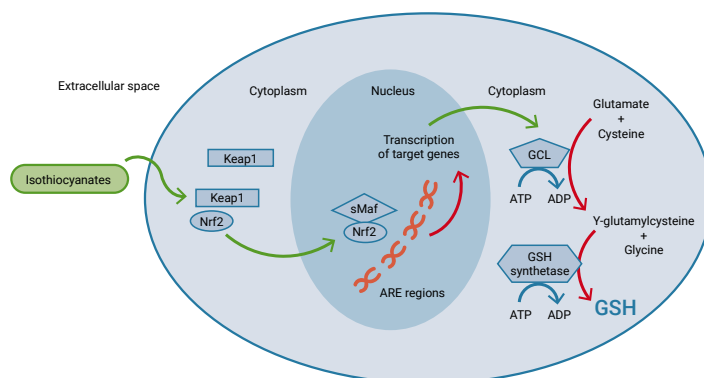
GSH-Defense has been developed by applying bespoke enzymatic treatments able to release all the beneficial molecules contained in rocket salad in their bioavailable and biologically active form. GSH-Defence is therefore able to effectively promote the synthesis of glutathione in skin. This helps cells to strengthen the natural defences against radical related stress increasing their endogenous antioxidant capacity.

GSH-Defense is able to soothe and calm irritated skin improving its capacity to recover after stress, since the product is able to quickly and effectively enhance the defensive response, also acting as a protective barrier.

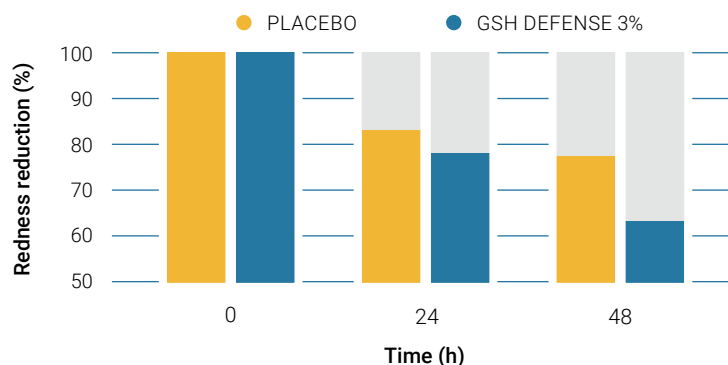
#### BENEFITS

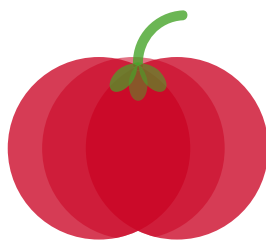
- **Boosts the synthesis of the tripeptide glutathione** (*in vitro* tests)
- **Protects the skin raising its endogenous antioxidant defences** (*in vitro* tests)
- **Soothes and calms irritated skin** (+20% *in vivo* test)

Stimulation of phase II defensive system and glutathione (GSH) production through isothiocyanates contained in GSH-Defense



Soothing effect of GSH-Defence 3% w/w on mild irritation induced on skin





TOMATO

# HYDROPOM®

## A COSMETIC DIET TO PROTECT SKIN FROM UV AND POLLUTION



### PRODUCT DESCRIPTION

Hydropom® is a water based lycopene-containing product specifically created for the cosmetic sector. To reach this goal Phenbiox developed the new exclusively patented A.M.C. (Aqueous Microdisperse Carotenoids) technology allowing for combining the bioliquefaction technologies to micro-dispersion of oil soluble molecules in water phase. Therefore, Hydropom® is a natural product, obtained using skins of tomatoes harvested in Italy, containing a completely water soluble lycopene.

Lycopene has been broadly studied for its protective effects due to its high anti radical potential, and a lycopene-rich diet is known to be able to protect skin from UV radiation. However, the main limitation of such a diet is the slow and non-homogenous delivery of skin protection. Hydropom® allows for quickly, effectively and homogenously delivery of the amount of lycopene needed to get efficient protection against UV radiation.

The protective effect of Hydropom® against environmental stress caused by anthropogenic pollution was assessed in different areas of our city, Bologna, Italy, in a very polluted crossroad and a park, with strictly monitored pollutions levels. Hydropom® is able to provide a very efficient protection against environmental pollution.

### BENEFITS

- **Natural water soluble lycopene containing product**
- **Efficient delivery of UV protecting molecules on skin**
- **Anti-pollution effect (+40% *in vitro* tests)**

### TECHNICAL INFORMATION

**INCI:** hydrolyzed tomato skin, citric acid, sodium benzoate, potassium sorbate.

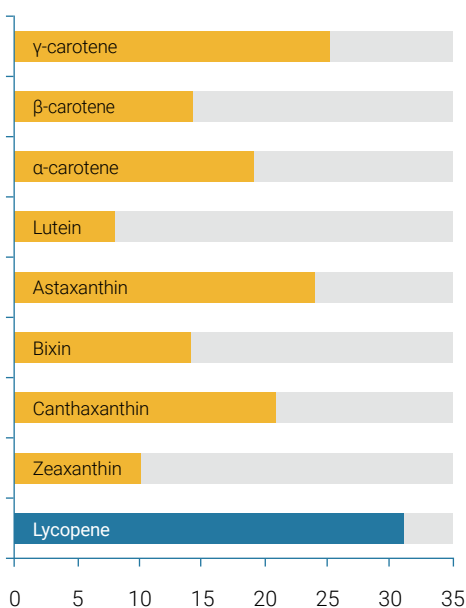
**PLANT USED:** tomato skins harvested in Italy.

**TECHNOLOGY:** Bioliquefaction Technology, Aqueous Microdisperse Carotenoids Technology.

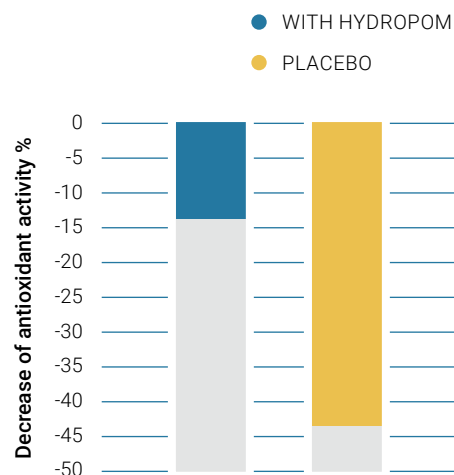
**SUGGESTED CONCENTRATION OF USE:** 3-5% w/w.

**ORGANIC STATUS:** generally accepted for organic certified formulations.

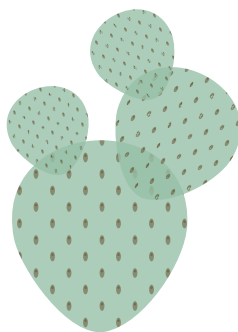
**CHINA STATUS:** also available in China compliant version.



Quenching constant values against singlet oxygen of some carotenoids



Protection of Vitamin E from pollution exposure due to the presence of Hydropom® 2% w/w



PRICKLY PEAR LEAVE

# HYDROPUNTIL

A SICILIAN CACTUS TO MOISTURIZE AND PROTECT THE SKIN



COSMOS  
APPROVED

COSMOS  
CERTIFIED

## PRODUCT DESCRIPTION

HYDROPUNTIL is produced with prickly pear leaves harvested in Sicily. The internal part of the juicy leaves was traditionally used on skin as an emollient and anti-inflammatory remedy as well as in wound healing. Scientific studies have shown these effects are due to the specific polysaccharides in prickly pear leaves that recently have been found to have similar effects as hyaluronic acid.

HYDROPUNTIL is able to deliver an efficient protective effect thus increasing the antioxidant capacity of cell membranes and reducing the release of pro-inflammatory interleukins.

The application of the product has been proven to efficiently moisturize the skin in just one week and to also deliver a strong protecting effect reducing the onset of redness.

## BENEFITS

- **Increases cell membrane antioxidant capacity** (*in vitro* tests)
- **Reduces interleukins release** (*in vitro* tests)
- **Moisturises the skin** (+35.0% *in vivo* test)
- **Prevents skin irritations** (-37.5% *in vivo* test)

## TECHNICAL INFORMATION

**INCI:** glycerin, *Opuntia ficus-indica* stem extract, citric acid, sodium benzoate, potassium sorbate.

**PLANT USED:** juicy prickly pear leaves (*Opuntia ficus-indica*) harvested in Sicily, Italy.

**TECHNOLOGY:** Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

**ORGANIC STATUS:** COSMOS approved / COSMOS certified.

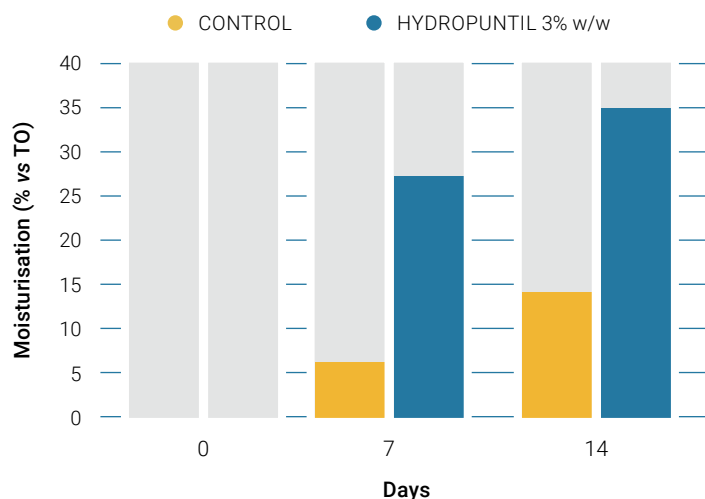
**CHINA STATUS:** the product is China listed.



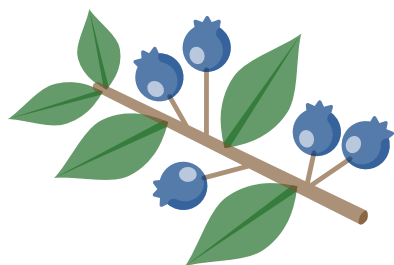
PLACEBO

HYDROPUNTIL

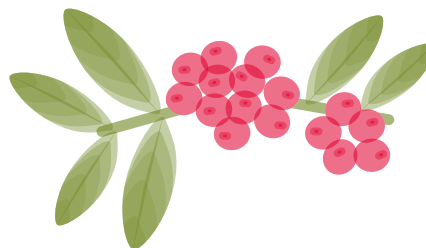
Induced irritation on skin treated with HYDROPUNTIL 3% w/w vs. placebo



Moisturisation improvement after a treatment with HYDROPUNTIL 3% w/w



MYRTLE



LENTISK

# LENTIMYRT HF

## MULTILEVEL SKIN BARRIER FUNCTION BOOSTER

SKIN

COSMOS  
APPROVED

### PRODUCT DESCRIPTION

Myrtle and Lentisk are characteristic plants of the Mediterranean flora and of the diet of Sardinia, an Italian island known to be a region with a remarkable biodiversity.

The plants are treated with Phenbiox's Hyperfermentation technology (Bioliquefaction + Fermentation) to reinforce the plant phytocomplexes, released by Bioliquefaction, transforming the inert fibres into even more active ingredients thanks to Fermentation.

LentiMyrt HF is a natural active ingredient able to promote the barrier function working at different levels on the skin. LentiMyrt HF rises the skin defences increasing its antioxidant capacity, promotes a positive modulation of skin microbiota and improves the hydrolipidic film increasing moisturisation and sebometry.

### BENEFITS

- **Rises the antioxidant defences of the skin** (+ 190% *in vivo* test)
- **Positively modulates skin microbiota** (*in vivo* test)
- **Promotes skin hydration** (+ 13.2% *in vivo* test)
- **Improves hydrolipidic film** (+ 59.6% *in vivo* test)

### TECHNICAL INFORMATION

**INCI:** aqua, *Myrtus communis* leaf extract, *Pistacia lentiscus* leaf extract, *Saccharomyces* ferment lysate filtrate, citric acid, sodium benzoate, potassium sorbate

**PLANT USED:** Myrtle and Lentisk from Sardinia

**TECHNOLOGY:** Hyperfermentation Technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

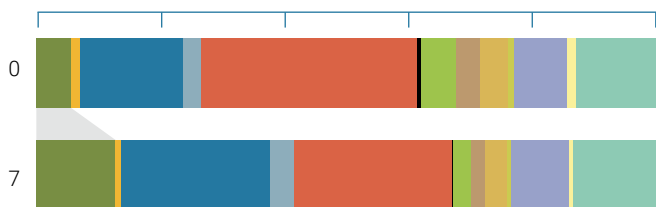
**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** also available in China compliant version.

Antiradical skin capacity of the skin after treatment with LentiMyrt HF 3% w/w.



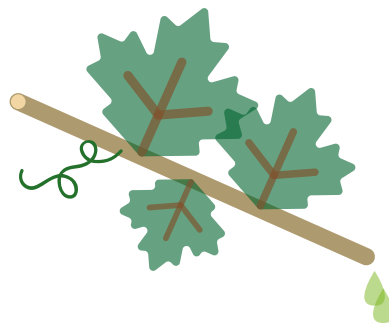
Rel. Ab. 0.0 0.2 0.4 0.6 0.8 1.0



- Actinomyetales\_f\_Corynebacteriaceae
- Actinomyetales\_f\_Micrococcaceae
- Actinomyetales\_f\_Propionibacteriaceae
- Bacteroidales\_f\_Bacteroidaceae
- Bacillales\_f\_Staphylococcaceae
- Lactobacillales\_f\_Lactobacillaceae
- Lactobacillales\_f\_Streptococcaceae
- Clostridiales\_f\_Lachnospiraceae
- Clostridiales\_f\_Ruminococcaceae
- Clostridiales\_f\_Tissierellaceae
- Neisseriales\_f\_Neisseriaceae
- Pasteurellales\_f\_Pasteurellaceae
- Other under 1%

Skin microbiota modulation after 1 week of treatment with LentiMyrt HF 3% w/w: increase of Corynebacteriaceae, associated to more efficient skin barrier functions.





GRAPE VINE SAP

# LIFE ESSENCE-VITIS

FROM VINEYARDS ON THE ITALIAN HILLS THE ESSENCE OF LIFE

SKIN

HAIR

COSMOS  
APPROVED

## PRODUCT DESCRIPTION

Spring has arrived in the Emilian hills and the warmth of the sun awakens the Malvasia vines from their long winter sleep. Noting this rise in temperature, the root of the vine activates the upward circulation of the precious tears of a powerful essence of life: vine sap

Vine sap contains a great vital force linked to the presence of a complex but extremely well-balanced mix of nutritional substances such as mineral salts, amino acids, natural saccharides, polyphenols, organic acids and auxins. This ideal plant cell nutrient is also a precious ally in nourishing and stimulating our cells and skin microbiota.

In order to effectively transfer vine sap to our skin and hair without altering its properties, we enclosed these precious tears inside plant liposomal systems.

LifeEssence-Vitis is therefore an essential nutrient able to improve the condition of the skin, increasing moisturisation and elasticity and repairing heavily damaged hair increasing elasticity and delaying breakage.

## BENEFITS

- **Efficient skin nutrition and stimulation** (*in vitro* tests)
- **Increases skin elasticity** (+19.7% *in vivo* test)
- **Promotes skin moisturisation** (+10.3% *in vivo* test)
- **Increases hair elasticity** (+13.7% *ex vivo* test)
- **Reduces hair breakage** (-27.6% *ex vivo* test)
- **Positively modulates skin microbiota** (*in vivo* tests)

Skin moisturisation and elasticity improvement after a treatment with Life Essence-Vitis 1.5% w/w

## TECHNICAL INFORMATION

**INCI:** aqua, *Vitis vinifera* vine sap, glycerin, sorbitol, lecithin, citric acid, xanthan gum, sodium benzoate, potassium sorbate.

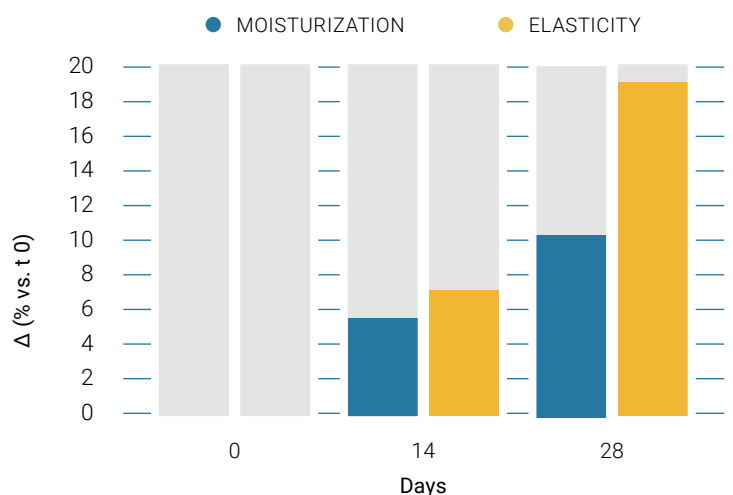
**PLANT USED:** vine sap from Emilian hills, Italy.

**TECHNOLOGY:** Natural Liposomes.

**SUGGESTED CONCENTRATION OF USE:** 1-1.5% w/w skin care, 1% w/w hair care.

**ORGANIC STATUS:** COSMOS approved.

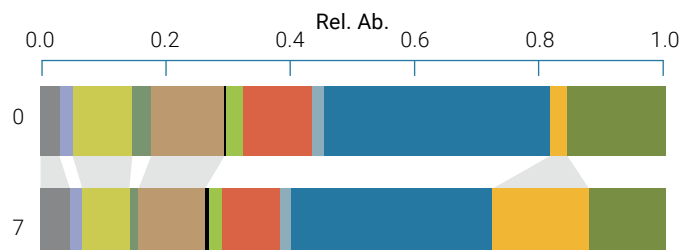
**CHINA STATUS:** the product is China listed.

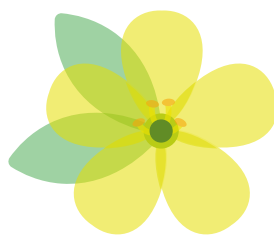


Skin microbiota modulation after 1 week of treatment with Life Essence-Vitis 1.5% w/w

- Increase of *Corynebacteriaceae* and *Xanthomonadaceae*, associated to healthier and more moisturized skin.
- Decrease of *Propionibacteriaceae* and *Staphylococcaceae*, potential skin threats.

- Actinomycetales;f\_\_Corynebacteriaceae
- Actinomycetales;f\_\_Micrococcaceae
- Actinomycetales;f\_\_Propionibacteriaceae
- Streptophyta;f\_\_
- Bacillales;f\_\_Staphylococcaceae
- Lactobacillales;f\_\_Lactobacillaceae
- Lactobacillales;f\_\_Streptococcaceae
- Burkholderiales;f\_\_Oxalobacteraceae
- Neisseriales;f\_\_Neisseriaceae
- Pseudomonadales;f\_\_Pseudomonadaceae
- Xanthomonadales;f\_\_Xanthomonadaceae
- Other





MULLEIN

# LUMINESCINE

## A REVOLUTIONARY CONCEPT IN SKIN RADIANCE



COSMOS  
APPROVED

COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

LUMINESCINE is the first natural active ingredient for cosmetics based on plant photoluminescence, the emission of visible light by a substance caused by high (UV) energy light.

Flowers are the main tool for plant reproduction and they hide secret tricks to better compete for pollinating insects. Mullein (*Verbascum Thapsus*) flowers are able to harvest UV radiation and transform it into new visible light to appear brighter, becoming more visible in the meadow and therefore, having a greater chance to attract insects.

In creating LUMINESCINE we harvested this secret feature of flowers allowing to create highly innovative cosmetic products.

LUMINESCINE is able to protect from harmful high-energy UV radiation, transforming it into a source of light that radiates directly from the skin and hair making them looking more radiant, shinier, younger and healthier.

### BENEFITS

- **Produces light due to photoluminescence** (*in vitro* tests)
- **Increases skin radiance** (+5.5  $\Delta$  L a.u. *in vivo* test)
- **Improve hair brightness and shine** (up to +10.3  $\Delta$  L a.u. *ex vivo* test)
- **Protects from UV-blue light induced photo-oxidative stress** (*in vitro* tests)
- **Inhibits tyrosinase and melanin synthesis** (*in vitro* tests)

### TECHNICAL INFORMATION

**INCI:** glycerin, hydrolyzed *Verbascum thapsus* flower, citric acid, sodium benzoate, potassium sorbate.

**PLANT USED:** Mediterranean mullein (*Verbascum Thapsus*) flowers.

**TECHNOLOGY:** Bioliquefaction Technology.

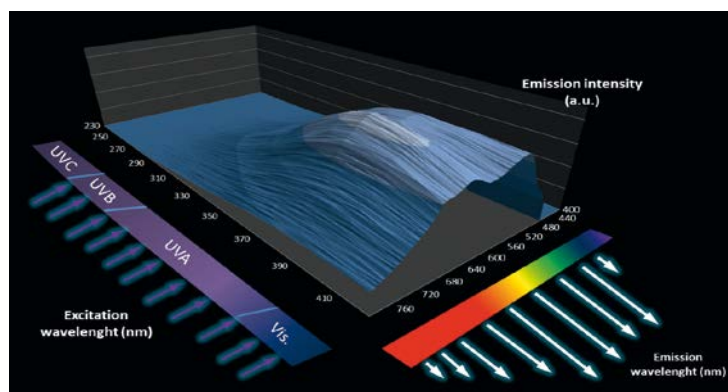
**SUGGESTED CONCENTRATION OF USE:** 3-5% w/w.

**ORGANIC STATUS:** COSMOS approved/ COSMOS certified.

**CHINA STATUS:** also available in China compliant version.



Forearm treated on the right with a gel containing Luminescine 4% w/w, effect in full sunlight



Excitation-emission spectra of Luminescine



MANNA

# MANNAFERM HF

## THE EXTRAORDINARY PROPERTIES OF FERMENTED SICILIAN MANNA



COSMETIC INGREDIENT FROM  
UPCYCLING

COSMOS  
APPROVED

### DESCRIPTION OF THE PRODUCT

In Ancient Rome, it was called Honey Dew or the Oozing of Stars. In the Bible it is described as a gift of God, sweet and white as frost. During the summer, the skilled hands of local ash tree growers harvest the precious product, maintaining a centuries-old tradition.

The sap of the ash tree is drawn from the bark of the trunks in the form of a liquid resin which the baking hot sun turns into white stalactites of Manna, rich in mannitol, organic acids, sugars, mucilage, resins, nitrogen compounds.

Enhanced by our exclusive hyperfermentation technology, the phytocomplex of Sicilian Manna becomes MANNAFERM HF, a strong aid in skin treatment.

### BENEFITS

- **Protects cells against osmotic stress** (*in vitro* test)
- **Protects cell junctions for greater cohesion of the epidermis** (*in vitro* test)
- **Moisturizes skin for 24 hours after the first application** (*in vivo* test)
- **Total body moisturizing action: face, décolleté, arms, hands, legs, scalp** (*in vivo* test)
- **Deep moisturization (+17%) and long-term moisturization (+15,5%)** (*in vivo* test)
- **Reduces skin scaliness (-34%)** (*in vivo* test)
- **Increases skin firmness (+ 41%)** (*in vivo* test)
- **Reduces wrinkles (-40%) and smoothens skin (+9%)** (*in vivo* test)

### TECHNICAL INFORMATION

**INCI:** glycerin, Fraxinus excelsior bark extract, saccharomyces ferment lysate filtrate, citric acid.

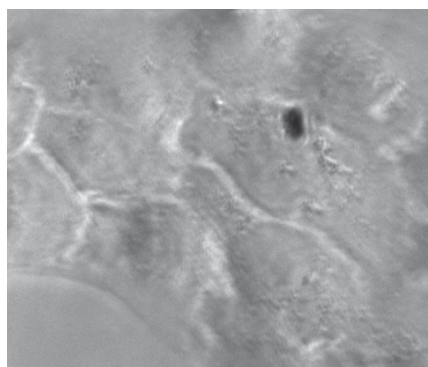
**PLANT USED:** Sicilian Manna.

**TECHNOLOGY:**  
Hyperfermentation Technology.

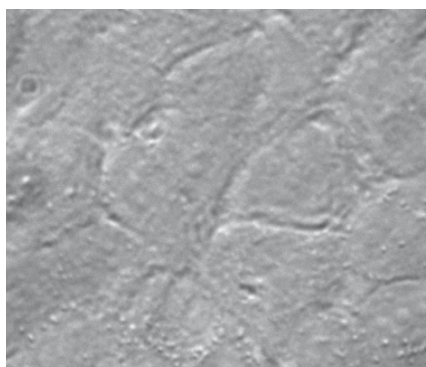
**RECOMMENDED CONCENTRATION:**  
3% w/w.

**BIOLOGICAL STATUS:** COSMOS approved.

**CHINA STATUS:** China listed.

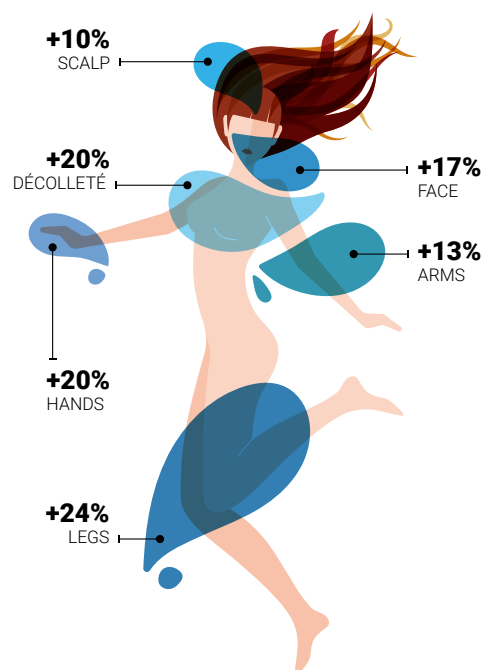


Osmotic Stress

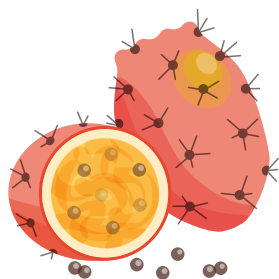


Osmotic Stress + MANNAFERM HF 1% w/w

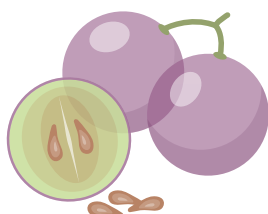
The morphological analysis of keratinocytes shows that MANNAFERM HF is able to protect cell junctions against osmotic stress, enhancing the cohesion of the epidermis



Total body hydrating action with MANNAFERM HF 3% w/w after 7 days of treatment



PRICKLY PEAR



GRAPE SEED



RICE



SUNFLOWER

# OLEOFACE

## ACTIVATED OILS TO PERFECT EYES, LIPS AND EYELASHES

SKIN

HAIR

COSMOS  
APPROVED

### PRODUCT DESCRIPTION

OLEOFACE is revolutionary cosmetic ingredient for skin care and color cosmetics derived from enzymatically activated oils. Combining the natural richness of sunflower, grape seed, rice bran, and prickly pear oils, OLEOFACE offers exceptional benefits for the eye area, lips, and eyelashes. The innovative enzymatic activation process of oils enhances skin absorption, allowing free fatty acids and glycerides to penetrate deeply and rejuvenate from within.

Clinically proven, OLEOFACE improves hydration, elasticity, and reduces scaliness and wrinkles. It visibly diminishes dark circles, smooths fine lines. For eyelashes, it nourishes, strengthens, and enhances shine and elasticity within one week.

This multifunctional ingredient caters to both skincare and makeup formulations, offering unparalleled sensoriality with reduced greasiness. OLEOFACE's anhydrous design ensures compatibility with make-up formulations. Thanks to the oils activation technology it is also possible to create minimalist formulations such as gels and serums, even without the need for emulsifiers.

### TECHNICAL INFORMATION

**INCI:** Helianthus Annuus Seed Oil, Vitis Vinifera Seed Oil, Oryza Sativa Bran Oil, Opuntia Ficus-indica Fruit Extract, Tocopherol.

**PLANT USED:** sunflower seed oil, grapeseed oil, rice bran oil, prickly pear seed oil.

**TECHNOLOGY:** Enzymatic Activation of Vegetable Oils.

**SUGGESTED CONCENTRATION OF USE:** Skin Care/Color Cosmetics 3% w/w.

**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** the product is China listed.

### BENEFITS

#### LIPS CONTOUR HYDRATION

- More hydrated skin for 24 hours with a single application
- Short-term hydration +29% in 15 min
- Long-term hydration +17.4% in 15d, +15.8% in 30d
- Deep moisturization +16.6% in 15d, +18.4% in 30d

#### LIPS CONTOUR ELASTICITY

- +27.2% in 15d, +26.4% in 30d

#### LIPS CONTOUR SKIN DESIGN

- Reduces scaliness -7.8% in 24 hours, -10.3% in 15d, -14.4% in 30d
- Reduces wrinkles width/depth increasing skin smoothness with a single application (+7.7%), +8.6% in 15d, +9.3% in 30d
- Reduces wrinkles -15.3% in 30d

Results of clinical studies  
performed with OLEOFACE  
3% w/w

#### EYELASHES

- In one week eyelashes are more nourished, thicker, stronger, shinier and more elastic

#### EYE AREA HYDRATION

- More hydrated skin for 24 hours with a single application
- Short-term hydration +21% in 15 min
- Long-term hydration +12.3% in 15d, +11.9% in 30d
- Deep moisturization +16.8% in 15d, +21.7% in 30d

#### EYE AREA ELASTICITY

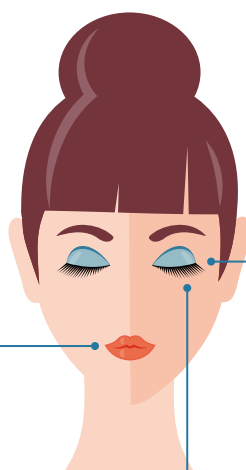
- +14.4% in 30d

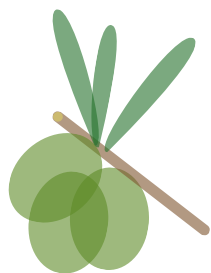
#### EYE AREA SKIN DESIGN

- Reduces scaliness -13.4% in 15d, -14.8% in 30d
- Reduces wrinkles width/depth increasing skin smoothness with a single application (+7.5%), +10% in 15d, +12.3% in 30d

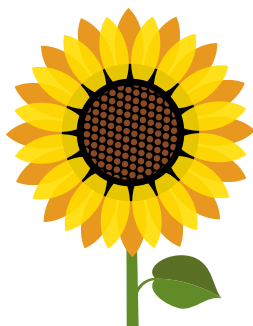
#### DARK CIRCLES/PERIORBITAL SKIN COLOUR

- Reduces dark circles:
- Melanin Index: -4.7 % in 15d, -8 % in 30d
- Hemoglobin Index: -1.7% in 15d, -4.2% in 30d

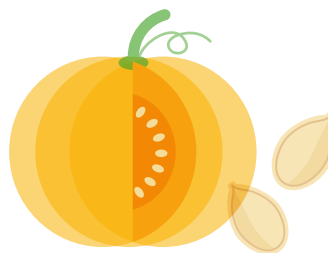




OLIVES



SUNFLOWER



PUMPKIN



SEA BUCKTHORN

# OLEOPHEN

## ACTIVATED OILS TO SOOTH/RESTORE SKIN AND IMPROOVE HAIR COMBABILITY AND SHINE

SKIN

HAIR

COSMOS  
APPROVED

### PRODUCT DESCRIPTION

The blend of vegetable oils used for OLEOPHEN (olive, sunflower seed, pumpkin seed and sea buckthorn oils) has been carefully selected on the basis of fatty acid composition. The Enzymatic Activation process of the oils allows the release of both typical sebum fatty acids such as palmitic, stearic, oleic and palmitoleic (an omega-7 analogue of sapienic acid), and essential fatty acids (linoleic and alpha linolenic) for complete nourishment of the hydrolipidic film.

Other important elements such as sterols, tocopherols, tocotrienols, carotenoids and phenols complete the effectiveness of the product by contributing to the defense of the skin from radical species and counteracting inflammation.

OLEOPHEN has shown excellent performances as a hydrating and anti-aging active ingredient and was found to be able to soothe inflamed skin and reconstitute the hydrolipidic film thanks to its restorative effect.

OLEOPHEN is able to strengthen hair and improve its shine and combability.

### BENEFITS

- **Promotes skin hydration** (+16.9% in 1 hour, +16.1% in 14 days, +15.4% in 28 days *in vivo* test)
- **Deep moisturization** (+17% in 14 days, +23% in 28 days *in vivo* test)
- **Increases skin firmness** (+6.5% in 28 days *in vivo* test)
- **Reduces skin scaliness** (-22.7% in 28 days *in vivo* test)
- **Reduces wrinkles** (-7.7% in 28 days *in vivo* test)
- **Reduces skin aging** (-8.4% in 28 days *in vivo* test)
- **Soothes irritated skin** (*in vivo* test)
- **Reduces TEWL of irritated skin** (*in vivo* test)
- **Strengthens hair and improves shine and combability** (*in vivo* half head rinse-off test vs. control)

### TECHNICAL INFORMATION

**INCI:** helianthus annuus seed oil, olea europaea fruit oil, cucurbita pepo seed oil, hippophae rhamnoides oil, tocopherol.

**PLANT USED:** olive oil, sunflower seed oil, pumpkin seed oil and sea buckthorn oil.

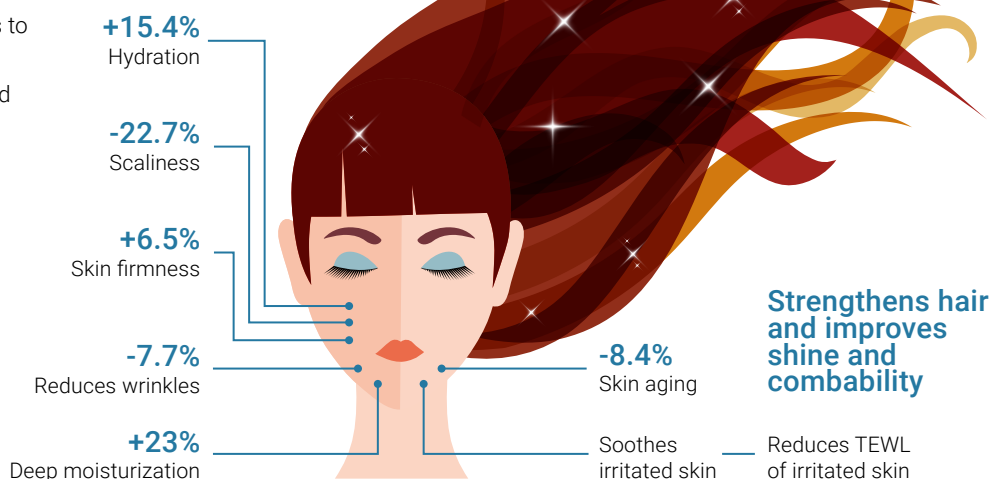
**TECHNOLOGY:** Enzymatic Activation of Vegetable Oils.

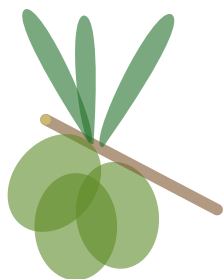
**SUGGESTED CONCENTRATION OF USE:** 3% w/w skin care, 1% w/w hair care.

**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** the product is China listed.

Benefits provided by treatments with OLEOPHEN:  
Skin care 3% w/w after 28 days  
Hair care 1% w/w after 2 weeks, 2 shampoo/week





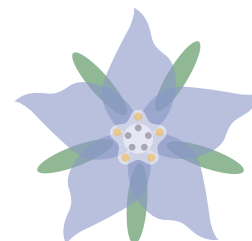
OLIVE



ALMOND



LINSEED



BORAGE SEED

# OLEOSOFT-40

ALL THE ENERGY OF VEGETAL OILS ENZYMATICALLY ACTIVATED

SKIN

HAIR

COSMOS  
APPROVED

## PRODUCT DESCRIPTION

OleoSoft-40 has been developed applying our enzymatic activation technology to a mix of almond oil, olive oil, linseed oil and borage oil, chosen for their content in different classes of highly nourishing fatty acids. This technology is able to release all the energy entrapped in vegetal oil stored in plants under the form of triglycerides. This process allows to break up triglycerides into their constituents (fatty acids and glycerides), creating a completely new phytocomplex.

OleoSoft-40 is able to moisturize the skin being much more quickly absorbed compared with the mix of untreated oils and it leaves the skin far less greasy with an amazing silicone like touch.

OleoSoft-40 can deeply nourish the skin affected by stretch marks, improving the elasticity and smoothness of the skin while reducing the redness.

OleoSoft-40 is able to improve hair elasticity, increasing the tensile strength.

## BENEFITS

- **Boosts mitochondrial activity** (*in vitro* tests)
- **Anti-stretch mark effect** (+34.4% *in vivo* test)
- **Increases skin elasticity** (+45.6% *in vivo* test)
- **Improves skin moisturisation** (+24.9% *in vivo* test)
- **Higher antioxidant capacity** (+114% *in vitro* tests)
- **Increases hair elasticity** (+53.0% *ex vivo* test)
- **Quicker absorption** (*in vivo* test)
- **Reduced greasiness** (*in vivo* test)
- **Silicone like sensorial performances**

## TECHNICAL INFORMATION

**INCI:** almond/borage/linseed/olive acids/glycerides, tocopherol.

**OILS USED:** olive oil, almond oil, linseed oil, borage seed oil.

**TECHNOLOGY:** Enzymatic Activation of Vegetable Oils.

**SUGGESTED CONCENTRATION OF USE:** 3-5% w/w skin care, 1% w/w hair care.

**ORGANIC STATUS:** COSMOS approved.

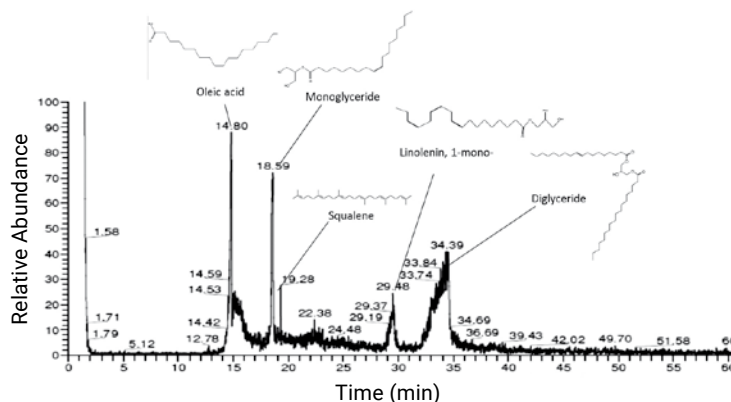
**CHINA STATUS:** also available in China compliant version.



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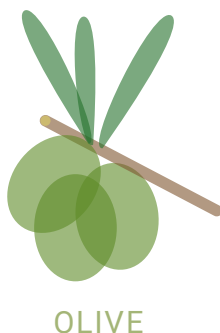
T60D

Improvement of stretch marks treated with OleoSoft-40 5% w/w



Chromatogram of direct GC injection of OleoSoft-40 showing the activated oil phytocomplex





# OLEOX®

## ORGANIC OLIVE FRUIT PHYTOCOMPLEX TO FIGHT RADICALS

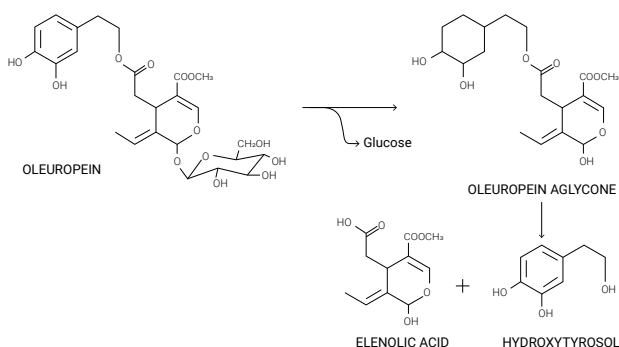


COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

OLEOX® is obtained performing our bioliquefaction process on fresh olives, selected among the richest in bio-phenols and originating from organic certified agriculture. OLEOX® is a water based product with a total phenolic concentration up to 50 -folds higher than extra virgin olive oil. Moreover, the bioliquefaction process has been targeted to enhance the antioxidant properties of the product, bio-refining the phenolic fraction in order to release the antioxidant molecules in their most effective form.

The phenolic fraction that characterizes OLEOX® has an effective protective action against oxidative stress. Having a very high antioxidant potential can prevent the damages caused by free radicals rapidly acting as an effective back up system supporting the natural skin defences. OLEOX® is a powerful skin antioxidant because of its high content of hydroxytyrosol and other effective phenolic compounds that are able to synergistically act against radical stress due to high bioavailability.



### BENEFITS

- **Bio-refined natural antioxidants to enhance bioavailability and activity** (*in vitro* tests)
- **Quick action against oxidative stress** (*in vitro* tests)

### TECHNICAL INFORMATION

**INCI:** Hydrolyzed olive fruit, citric acid, sodium benzoate, potassium sorbate.

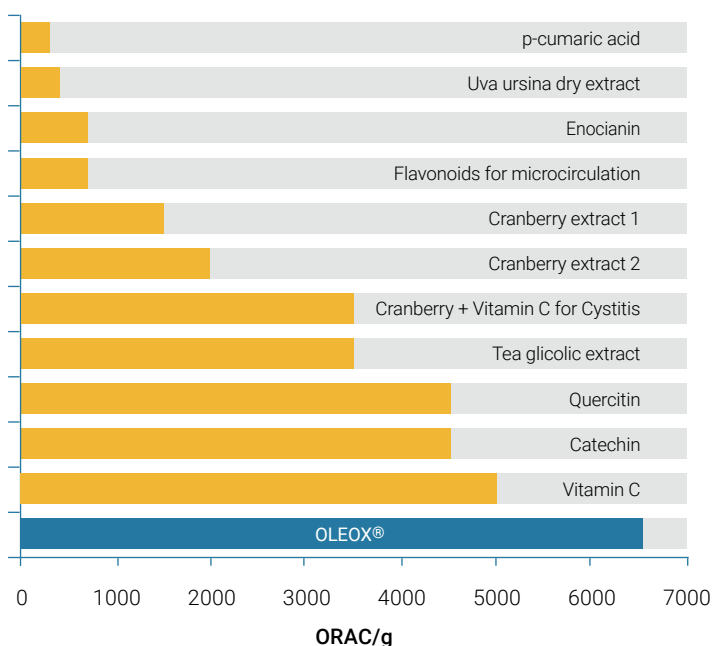
**PLANT USED:** organic certified olives from the Marche region, Italy.

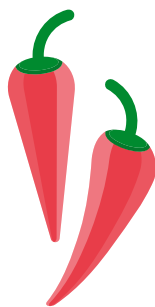
**TECHNOLOGY:** Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 2% w/w.

**ORGANIC STATUS:** COSMOS certified.

**CHINA STATUS:** also available in China compliant version.





RED CHILI PEPPER

## P-CELL

### STIMULATED RED CHILI PEPPER STEM CELLS TO INCREASE SKIN ELASTICITY

SKIN

COSMOS  
APPROVED

#### PRODUCT DESCRIPTION

To produce P-Cell, we have carefully researched available literature to select a different variety of chili pepper. From each selected variety a stem cell culture was obtained and then each culture was assessed to evaluate its potential in producing a rich phytocomplex. This extensive lab research allowed us to select the better performing red chili pepper stem culture to produce P-Cell.

The stimulation process allowed to obtain a rich phytocomplex able to effectively boost skin metabolism promoting cell protein synthesis.

P-Cell is able to start delivering a significant effect in just ten days and can drastically increase skin elasticity within twenty days of treatment.

#### BENEFITS

- **Boosts skin metabolism promoting protein synthesis** (*in vitro* tests)
- **Starts increasing skin elasticity in just ten days** (+9% *in vivo* test)
- **Drastically improves skin elasticity within twenty days** (+20% *in vivo* test)

#### TECHNICAL INFORMATION

**INCI:** glycerin, *Capsicum annuum* fruit meristem cell, citric acid, sodium benzoate, potassium sorbate.

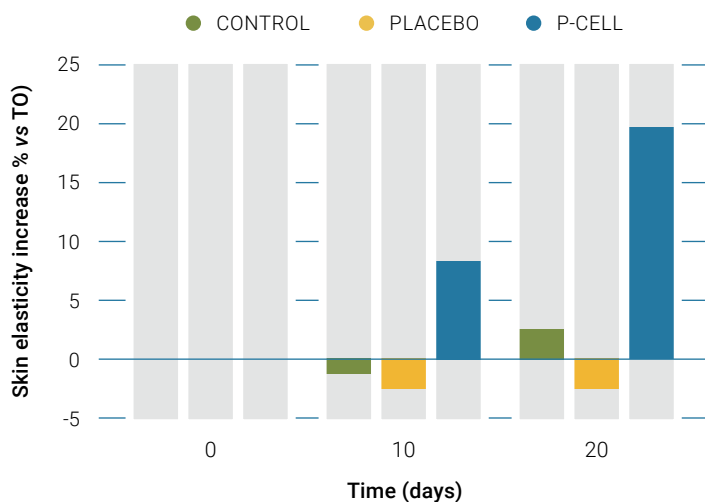
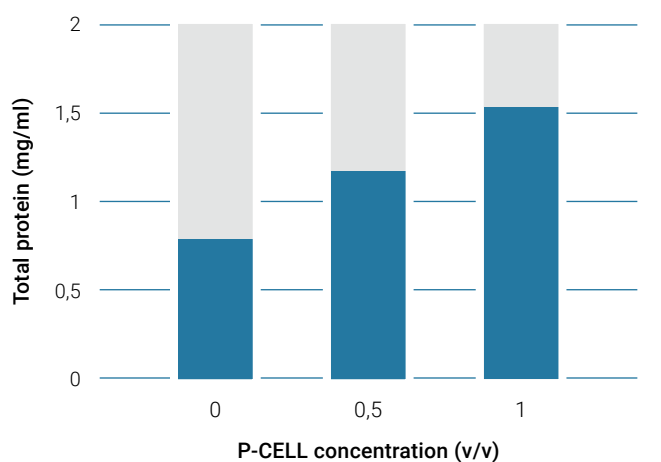
**PLANT USED:** stem cell culture obtained by selected red chili pepper harvested in the botanical garden of the University of Bologna, Italy.

**TECHNOLOGY:** Stimulated Stem Cell Technology.

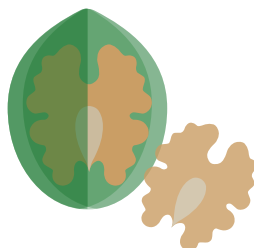
**SUGGESTED CONCENTRATION OF USE:** 1% w/w.

**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** also available in China compliant version.







WALNUT

# PRO-STRUCTURE

## GREEN WALNUTS TO PROTECT HAIR COLOUR AND INCREASE SKIN ELASTICITY



COSMETIC INGREDIENT FROM  
**UPCYCLING**

COSMOS  
APPROVED

### PRODUCT DESCRIPTION

In our laboratories we have spotted a particular stage of walnut ripening when the green walnuts are richer in active molecules. Large size phenolics are able to effectively interact with proteins and are also very efficient antioxidants, these molecules are the key of the efficacy of Pro-Structure.

Pro-structure due to its phytocomplex can create new interactions between corneocytes proteins improving skin elasticity.

The phenolic fraction of Pro-Structure is also able to interact well with hair, making the hair itself antioxidant and therefore protected. This also results in long term protection since hair are still well protected after 3 days.

This close and efficient interaction between hair and Pro-Structure active molecules is also able to provide efficient hair colour protection from the UV/radical induced colour fading.

### BENEFITS

- **Improves skin elasticity** (+15% *in vivo* test)
- **Provides long term anti-radical protection to hair** (up to +400% *ex vivo* test)
- **Protects hair colour** (+53% *ex vivo* test)

### TECHNICAL INFORMATION

**INCI:** hydrolyzed walnut extract, citric acid, sodium benzoate, potassium sorbate.

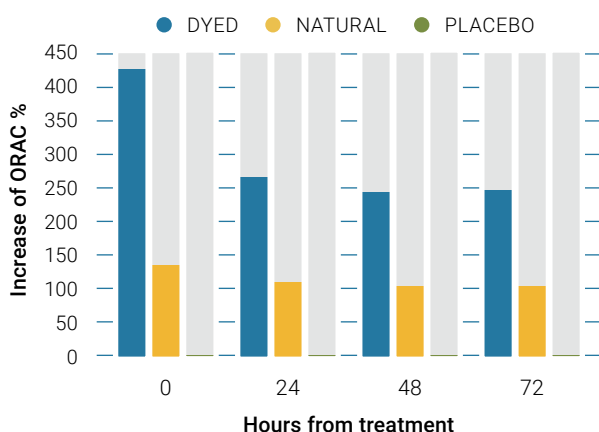
**PLANT USED:** green walnuts fruit from the Veneto region, Italy.

**TECHNOLOGY:** Bioliquefaction Technology.

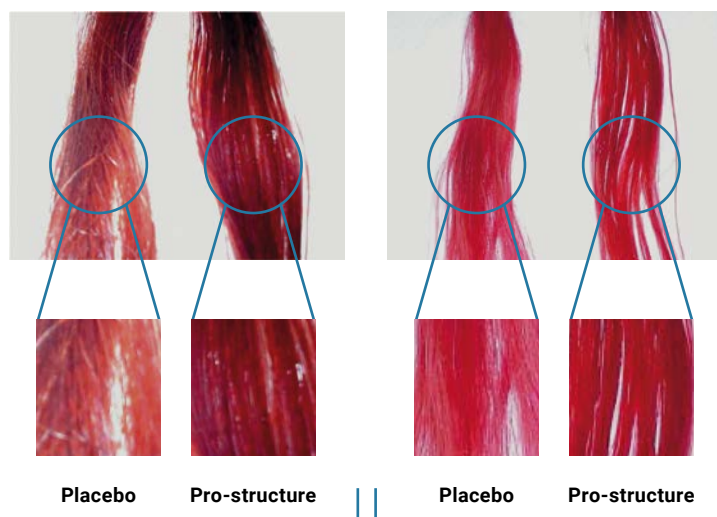
**SUGGESTED CONCENTRATION OF USE:** 2.5-5% w/w skin care, 1% w/w hair care.

**ORGANIC STATUS:** COSMOS approved.

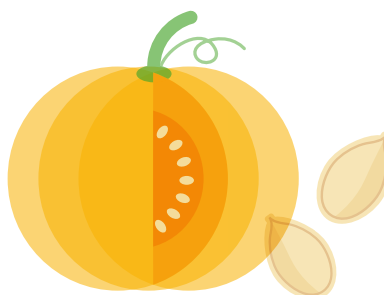
**CHINA STATUS:** also available in China compliant version.



Antiradical capacity (ORAC) of different hair after treatment with Pro Structure



Hair colour protection from UV induced fading. Leave on treatment with Pro-Structure 1% w/w vs. placebo.



PUMPKIN SEED

# PUMPCOLL

## PHYTOCOLLAGEN FROM UPCYCLING



COSMETIC INGREDIENT FROM  
UPCYCLING

COSMOS  
APPROVED

### PRODUCT DESCRIPTION

Pumpkin seed oil production in Europe is done through cold pressing. The cake is the residue of pressing the pumpkin seed and constitutes a by-product with a very high protein content.

There are interesting similarities between the amino acid profile of pumpkin seed proteins and animal collagen, such as the abundance of Glycine, Proline and Alanine.

The proteins of the pumpkin seedcake were upcycled through enzymatic hydrolysis (Bioliquefaction) to produce PUMPCOLL.

PUMPCOLL has been extensively tested *in vivo* to evaluate its cosmetic activities and to compare them in terms of effectiveness with animal derived collagen (hydrolyzed marine collagen).

PUMPCOLL promotes hydration, elasticity, skin tone, plumps the skin and effectively acts on wrinkles with better results than animal collagen.

PUMPCOLL also strengthens the hair by increasing the average diameter and reduces hair loss.

### BENEFITS

- **Promotes skin hydration**  
(+25,2% in 1 hour, +17.9 in 14 days, +16.2 in 28 days) (*in vivo* test)
- **Deep moisturization**  
(+16.5 in 14 days, +32.5 in 28 days) (*in vivo* test)
- **Increases skin firmness**  
(+25.9 in 14 days, +33.3 in 28 days) (*in vivo* test)
- **Increases skin elasticity**  
(+8.4 in 14 days, +18.4 in 28 days) (*in vivo* test)
- **Filler effect** (+14.1 in 14 days, +16.9 in 28 days) (*in vivo* test)
- **Reduces skin scaliness**  
(-8.5% in 28 days) (*in vivo* test)
- **Reduces wrinkles**  
(-28% in 28 days) (*in vivo* test)
- **Strengthens the hair by increasing the average diameter and reducing hair loss**

### TECHNICAL INFORMATION

**INCI:** aqua, *Cucurbita pepo* seed extract, citric acid, sodium benzoate, potassium sorbate.

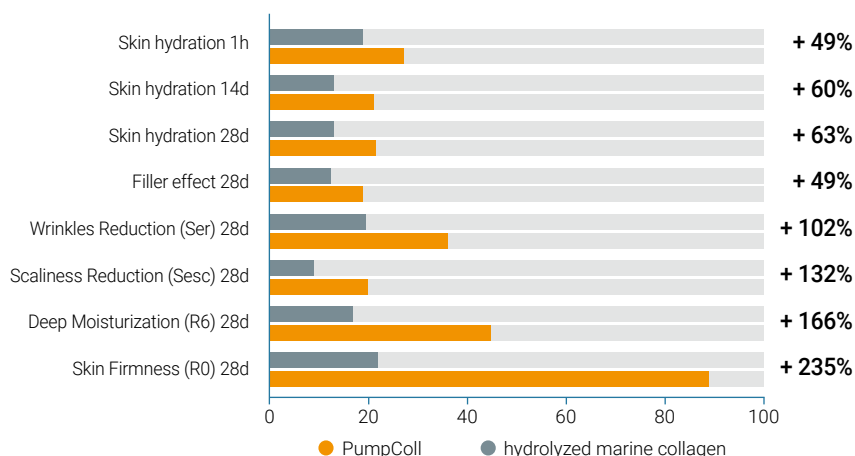
**PLANT USED:** Pumpkin seedcake of European origin.

**TECHNOLOGY:** Bioliquefaction Technology.

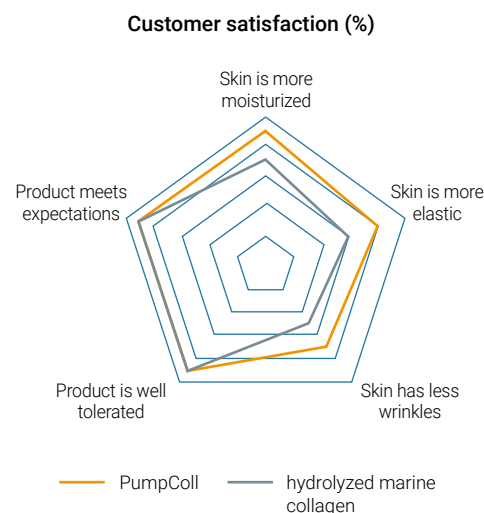
**SUGGESTED CONCENTRATION OF USE:** 3% w/w, skin care 1%, hair care.

**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** the product is China listed.



Half face comparison instrumental *in vivo* test performed using gel formulations containing 3% w/w of PumpColl or marine hydrolyzed collagen



Half face customer satisfaction questionnaire results using gel formulations containing 3% w/w of PumpColl or marine hydrolyzed collagen (% of positive feedbacks)



GRAPE



GINGER



FRANKINCENSE

## PURE-PHEN

PURIFIES THE SKIN RE-BALANCING THE MICROBIOTA



COSMOS  
APPROVED

COSMOS  
CERTIFIED

### PRODUCT DESCRIPTION

Ginger, frankincense and grape have been always known and used in different part of the world as medical plants as well as in purifying rituals. Different classes of molecules from each plant are able to act as purifying agents and as bacteriostatic molecules against potential pathogenic species, to sooth, protect and condition the skin.

Pure-Phen is a purifying, soothing, conditioning natural and preservative free active ingredient able to help the skin and the scalp to go back to healthy conditions with a mild but effective treatment, being more tolerable compared to synthetic ingredients.

Pure-Phen is not altering the physiological condition of the skin, helping it in re-balancing the microbiota, reducing imperfections, redness and unpleasant sensations related to acne and dandruff.

### BENEFITS

- **Completely natural and preservative free ingredient**
- **More tolerable compared to synthetic benchmarks** (*in vitro* tests)
- **Reduces interleukins release** (*in vitro* tests)
- **Bacteriostatic effect against *Staphylococcus epidermidis* and *Malassezia furfur*** (*in vitro* tests)
- **Re-balances dysbiosis of skin microbiota** (*in vivo* test)
- **Does not alter healthy skin microbiota** (*in vivo* test)
- **Does not alter the physiological conditions of skin and scalp** (*in vivo* test)
- **Reduces skin redness** (-18.4% *in vivo* test)
- **Reduces the number of acne related skin lesions** (-13.3% *in vivo* test)
- **Reduces dandruff related scaling problems** (-17.0% *in vivo* test)
- **Promotes restoration of normal conditions of the scalp** (*in vivo* test)



T0

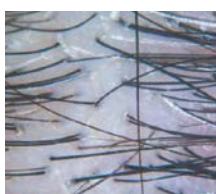


T30

Improvement of acne treated with Pure-phen 3% w/w



T0



T30

Improvement of dandruff treated with Pure-phen 3% w/w

### TECHNICAL INFORMATION

**INCI:** glycerin, *Vitis vinifera* fruit extract, *Zingiber officinale* root extract, *Boswellia serrata* resin extract.

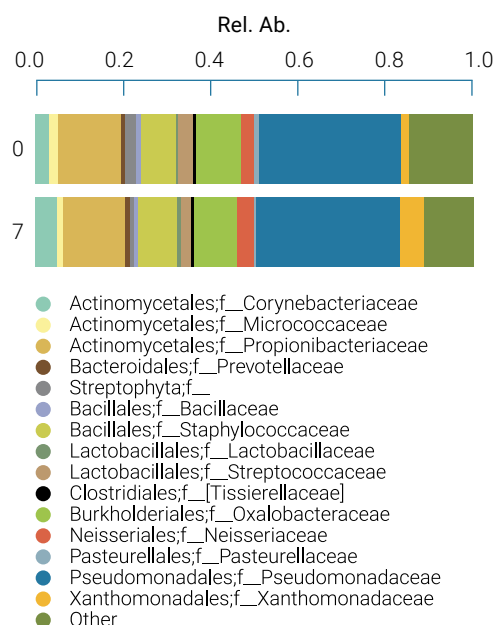
**PLANT USED:** ginger (*Zingiber officinale*) roots, frankincense (*Boswellia serrata*) resin and grape (*Vitis vinifera*) fruit.

**TECHNOLOGY:** Bioliquefaction Technology.

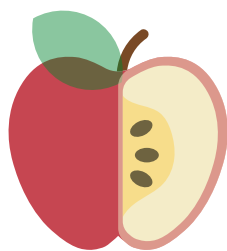
**SUGGESTED CONCENTRATION OF USE:** 3% w/w for skin care and hair care applications.

**ORGANIC STATUS:** COSMOS approved/ COSMOS certified.

**CHINA STATUS:** the product is China listed.



Pure Phen 3% w/w not altering healthy skin microbiota (1 week treatment)



APPLE



LEMON



GRAPE



WHEAT BRAN

## REGENINE

A MIX OF ITALIAN FRUITS FOR SKIN RENEWAL AND HAIR BEAUTY



COSMETIC INGREDIENT FROM  
UPCYCLING

### PRODUCT DESCRIPTION

REGENINE was created by selecting several plants (grape, apple, lemon and wheat bran) produced in specific areas in Italy where their cultivation is a long-standing tradition, able to provide high quality products.

REGENINE can be used to gently but efficiently renew skin both from the outside, due to the natural AHA content, and from the inside, being able to nourish and protect the lower layers of the skin. This product can be used in professional rinse-off formulations as well as in leave-on products due to its high tolerability.

REGENINE is also ideal for several hair care applications due to the rich phytocomplex able to improve hair brightness thanks to its anti-limescale and anti-sea salt effect. It also protects dyed hair, sealing hair cuticles to prevent colour fading from dye washing out.

### BENEFITS

- **Effective skin renewal** (+83% *in vivo* test)
- **Milder and safer than benchmark AHA** (*in vitro* tests)
- **Improve hair brightness due to an anti-limescale and anti-sea salt effect** (*ex vivo* test)
- **Protect dyed hair colour from fading due to washing out** (*ex vivo* test)

### TECHNICAL INFORMATION

**INCI:** tartaric acid, *Pyrus malus* (apple) fruit extract, citric acid, *Citrus limon* (lemon) fruit extract, *Vitis vinifera* (grape) skin extract, *Triticum vulgare* (wheat) bran extract, sodium benzoate, potassium sorbate.

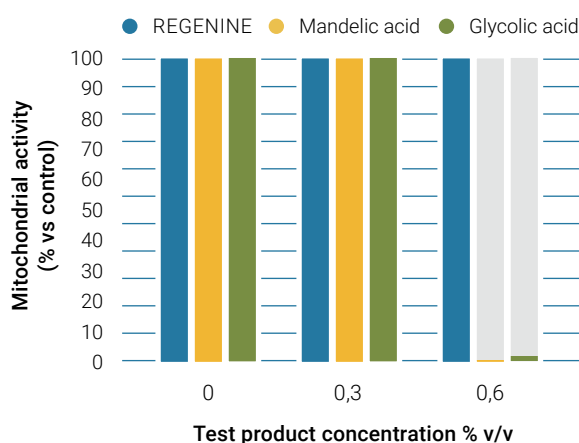
**PLANT USED:** red organic grape skin from the Emilia-Romagna region, lemons from Sicily, apples from Trentino-Alto Adige, organic wheat bran from the Po river valley.

**TECHNOLOGY:** Bioliquefaction Technology.

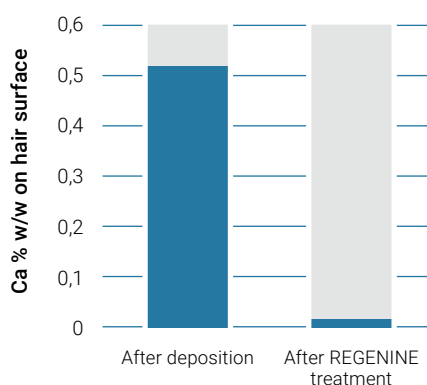
**SUGGESTED CONCENTRATION OF USE:** 1-10% w/w skin care, 1% w/w hair care.

**ORGANIC STATUS:** generally accepted for organic certified formulations.

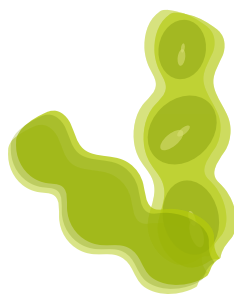
**CHINA STATUS:** product is China listed.



Tolerability of Regenine compared to benchmarks (on keratinocytes)



SEM x-ray elemental analysis: content of calcium on hair surface after limescale deposition and limescale deposition + REGENINE 1% w/w treatment



SOYBEAN

## SOY-CELL

### STIMULATED SOY STEM CELLS TO REDUCE WRINKLES AND MAKE SKIN FIRMER

SKIN

COSMOS  
APPROVED

#### PRODUCT DESCRIPTION

Soy is very well known for multiple activities that its phytocomplex, rich in isoflavones, is able to deliver such as re-activating skin metabolism and improving aging skin.

Soy stem cells were obtained forcing differentiated soy tissues to go back to their undifferentiated form and pushing them to overproduce their phytocomplex. An enzymatic process was associated to the stem cell stimulation process to further increase the bioavailability of this phytocomplex.

Soy-Cell is able to effectively protect skin cells from both photo-aging and radical-induced damage.

Soy-Cell effectively increases skin firmness after just one week of treatment and drastically reduces wrinkles within three weeks.

#### BENEFITS

- **Protects skin from photo aging and radical induced damages** (*in vitro* tests)
- **Increases skin firmness in one week** (+17.9%, 24.5% in 3 weeks *in vivo* test)
- **Drastically reduces wrinkles in three weeks** (-27.3% *in vivo* test)

#### TECHNICAL INFORMATION

**INCI:** aqua, *Glycine max* callus culture, citric acid, sodium benzoate, potassium sorbate.

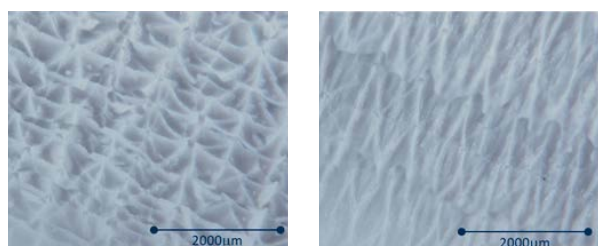
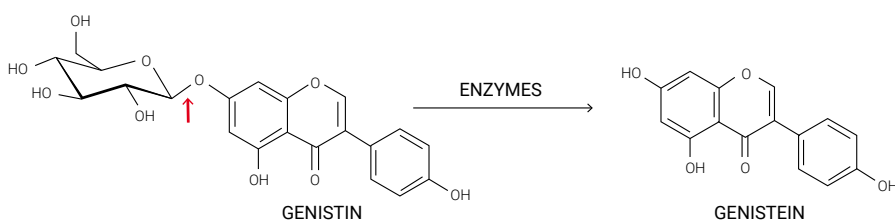
**PLANT USED:** stem cell culture obtained by non-GMO, organic certified soy seeds sprouted in our labs.

**TECHNOLOGY:** Stimulated Stem Cell Technology, Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 1.5% w/w.

**ORGANIC STATUS:** COSMOS approved.

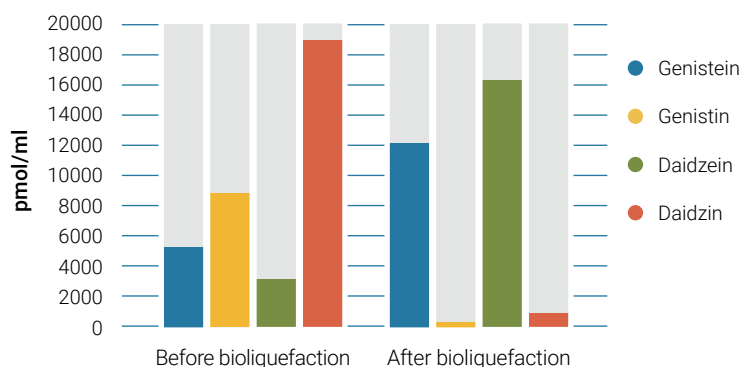
**CHINA STATUS:** also available in China compliant version.



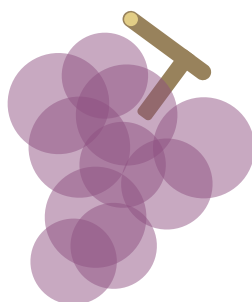
Before treatment

After 21 days with Soy Cell 1,5%

Skin silicon replica before and after treatment with Soy-Cell 1.5% w/w



Biorefining process of soy isoflavones through bioliquefaction® process



GRAPE

## UVIOX®

### ORGANIC RED GRAPE SKIN PHYTOCOMPLEX TO PREVENT AGING



COSMETIC INGREDIENT FROM  
**UPCYCLING**

COSMOS  
CERTIFIED

#### PRODUCT DESCRIPTION

Grape skins protect grapes from UV overexposure, pathogen attacks, environmental pollution and adverse weather conditions. The thousands of molecules that grapes are able to synthesize and accumulate in its fruit skin are the secret of its defences.

It was shown that grape polyphenols have an inhibitory activity on membrane metalloproteases 2 (MMP2) of some skin cell lines. MMP2, also called collagenases or gelatinases A, is one of the causes of degradation of collagen and other skin proteins, such as the insoluble form of elastin, causing decreased skin tone and elasticity as well as wrinkles.

UVIOX® allows for absorbing all the active molecules of organic certified grape skins in a bioavailable form. The cosmetic formulation become a shuttle able to deliver this active chemistry on skin helping it staying healthy and young.

#### BENEFITS

- **High anti-radical effect** (*in vitro* tests)
- **Acts as preventative anti age** (*in vitro* tests)

#### TECHNICAL INFORMATION

**INCI:** hydrolyzed grape skin, citric acid, sodium benzoate, potassium sorbate.

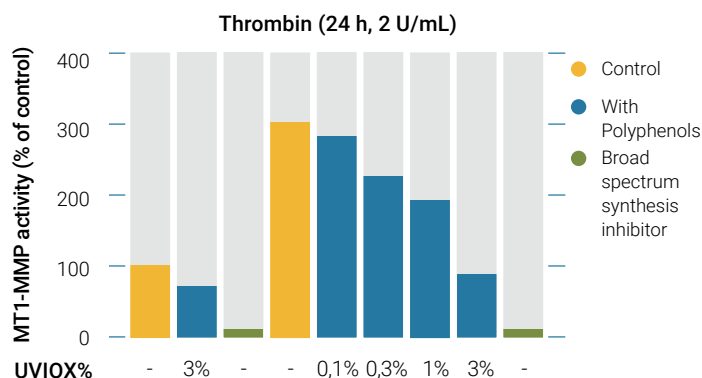
**PLANT USED:** red organic grape skin from the Emilia-Romagna region.

**TECHNOLOGY:** Bioliquefaction Technology.

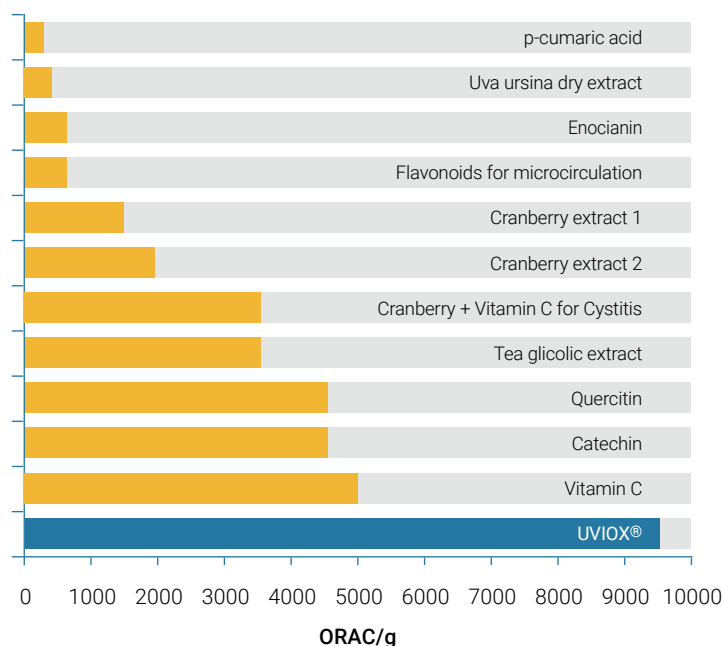
**SUGGESTED CONCENTRATION OF USE:** 1-3% w/w.

**ORGANIC STATUS:** COSMOS certified.

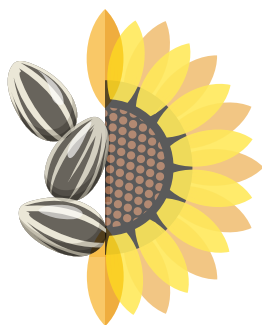
**CHINA STATUS:** also available in China compliant version.



Inhibitory effect of grape phenols on MMP2 correlated with the concentration of UVIOX® needed to reach the right concentration of phenols in a cosmetic formulation



Comparison of antioxidant activity (expressed as ORAC/g) of UVIOX® and other solutions of commercial products



SUNFLOWER



RICE

# VEGEKER-PLUS CF

## SUNFLOWER AND RICE PHYTKERATIN

HAIR

COSMOS  
APPROVED

### PRODUCT DESCRIPTION

Keratin is a highly stable and resistant filamentous protein, forming the main constituent component of hair and nails. It basically consists of long chains of amino acids, with an alpha-helix or beta-sheet secondary structure (for example in hair cuticle), in which vitamins, lipids and trace elements are also present.

One of the most commonly used cosmetic ingredients designed to improve the mechanical properties of hair is animal-origin keratin due to its effectiveness. Recently, however, the cosmetics sector has moved towards a more plant-based approach as an alternative to the use of animal-sourced raw materials.

Enzymatic Bioliquefaction technology was employed to hydrolyse a combination of Hemp and Rice proteins and obtain VEGEKER-PLUS CF, a completely plant-based product that acts as a replacement for animal keratin in cosmetic hair-care products, giving hair much greater strength and elasticity.

### BENEFITS

- **Strengthens hair**  
(+ 80% ex vivo test)
- **Makes hair more elastic**  
(+ 11% ex vivo test)
- **Hemp based ingredient**
- **An alternative to animal keratin**
- **More effective than animal keratin**

### TECHNICAL INFORMATION

**INCI:** aqua, helianthus annuus seed extract, hydrolyzed rice protein, citric acid, sodium benzoate, potassium sorbate.

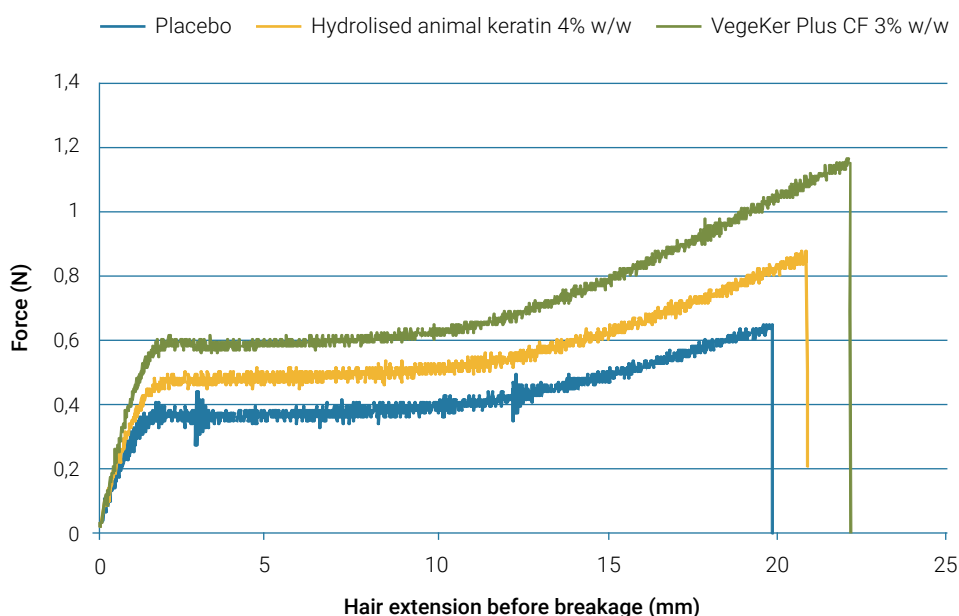
**PLANT USED:** Sunflower and Rice.

**TECHNOLOGY:** Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 3% w/w.

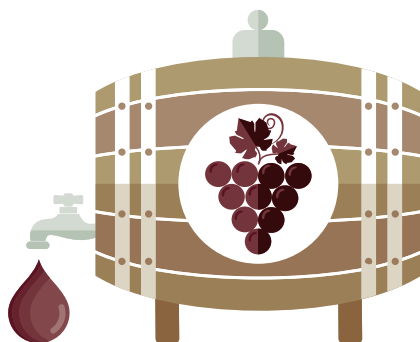
**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** not allowed in China.



Graph of the extension of the hair vs. force applied. VEGEKER-PLUS CF is more effective than animal keratin.





GRAPE BALM

# VITISBALM

## SLOWLY FERMENTED GRAPE BALM FOR TOTAL ANTI AGING FACIAL CARE

SKIN

COSMOS  
APPROVED

### DESCRIPTION OF THE PRODUCT

Grape balm is an ancient tradition of small villages in the area of Modena, Italy. At the birth of a daughter, a "battery" of new casks, crafted with different woods, is prepared and the slow fermentation of grape juice is initiated and reinvigorated year after year. After twenty years of aging this "battery" and its balm, would represent an important part of the bride's dowry. Grape juice, with the passing of seasons and years, becomes enriched thanks to the slow fermentation and extraction of essences from the various woods in which it rests and is concentrated through slow evaporation. The resulting product was considered a real balm to be used in celebration after a feast, aid digestion and reinvigorate the body. It is extremely rare and precious, to be exchanged or given away to forge new ties and strengthen existing ones.

VitisBalm is an active ingredient based on Modena grape balm aged for decades which, thanks to Bioliquefaction Technology, releases all effective components of the fermented phytocomplex, rich in phenolics, tannins, flavonoids, amino acids, organic acids and polysaccharides. VitisBalm acts as a powerful active for facial care able to promote skin hydration, elasticity and thickness, to reduce dark circles and eye bags and fight wrinkles.

### BENEFITS

- **Promotes skin hydration** (+12.2% *in vivo* test)
- **Increases deep moisturization** (+8.3% *in vivo* test)
- **Increases skin elasticity** (+19% *in vivo* test)
- **Reduces skin scaliness** (-20% *in vivo* test)
- **Reduces wrinkles** (-7.6% *in vivo* test)
- **Delivers a filler effect** (+9% *in vivo* test)
- **Reduces eye bags** (-15% *in vivo* test)
- **Reduces dark circles** (Melanin Index -5.7%, Hemoglobin Index -8.1% *in vivo* test)

### TECHNICAL INFORMATION

**INCI:** glycerin, vitis vinifera juice, acetum, citric acid.

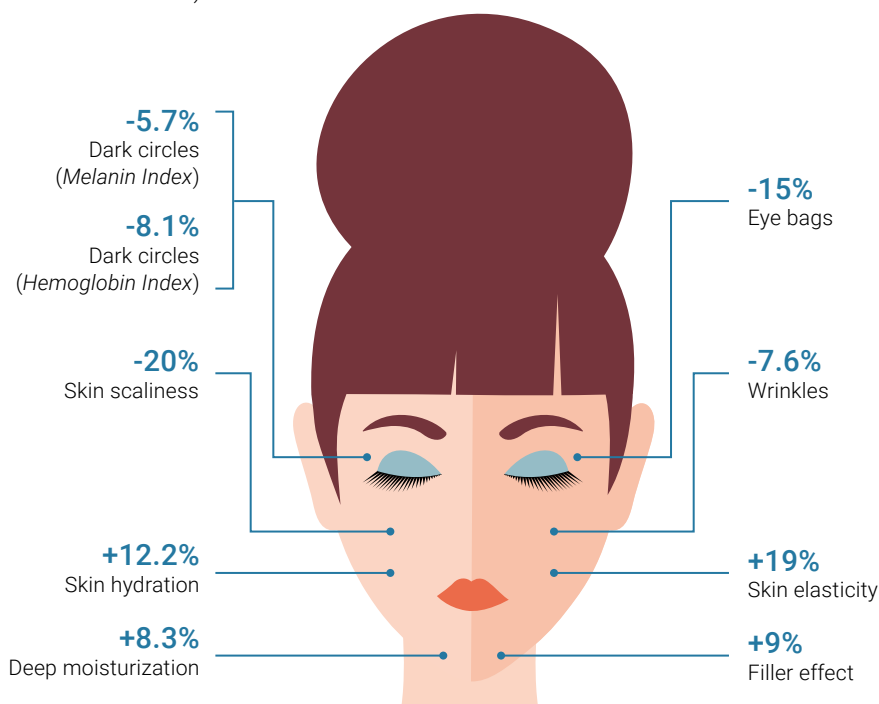
**PLANT USED:** Grape balm from Modena.

**TECHNOLOGY:** Bioliquefaction Technology.

**RECOMMENDED CONCENTRATION:** 3% w/w.

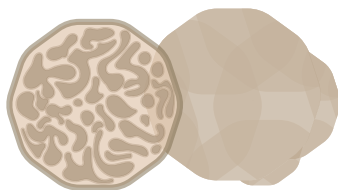
**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** China listed.



Total anti aging facial care action with VitisBalm  
3% w/w after 30 days of treatment





WHITE TRUFFLE

# W TR-ACTIVE

## MULTIPLE ANTI-AGING EFFECTS THROUGH EPIGENETIC MODULATION



COSMOS  
APPROVED

### PRODUCT DESCRIPTION

White truffle is one of the most exclusive food on the market, it is not only delicious but also extremely rare because it only grows in some specific areas and only in Italy.

Truffles have been known since the beginning of time and were greatly appreciated by the Romans, who believed this precious fungus was generated by lightning thrown by Jupiter near an oak. White truffles have also always been considered an aphrodisiac food and apparently Casanova was using them to seduce women. This feature seems to be triggered by the chemicals creating the truffle aroma, given that in nature truffles attract mammals consuming the fruiting bodies and contribute to spore dispersal due to pheromone-like molecules.

W Tr-Active was tested to evaluate the gene expression modulation of over 42,000 genes on two different cell lines. W Tr-Active was able to successfully modulate several groups of genes (MMPs, extracellular matrix proteins, aquaporins, and damaged protein degradation processes and vitagenes) involved in preventing skin from aging and promoting skin health by delivering a broad spectrum action.

The *in vivo* test proved that W Tr-Active was able to act as a powerful multiple anti-aging active ingredient able to reduce wrinkles and eye bags, increase skin tone and thickness (filler effect) and significantly improve skin moisture.

### BENEFITS

- **Positive epigenetic modulation of anti-aging, repairing and protective genes** (*in vitro* tests)
- **Increases skin elasticity** (+35.0% *in vivo* test)
- **delivers a filler effect** (+0.39 mm *in vivo* test)
- **Reduces wrinkles** (-12.8% *in vivo* test)
- **Reduces eye bags** (-14.0% *in vivo* test)
- **Promotes skin hydration** (+13.0% in 24 hours, +45.0% in 15 days *in vivo* test)

### TECHNICAL INFORMATION

**INCI:** glycerin, *Tuber magnatum* extract, sodium benzoate, potassium sorbate.

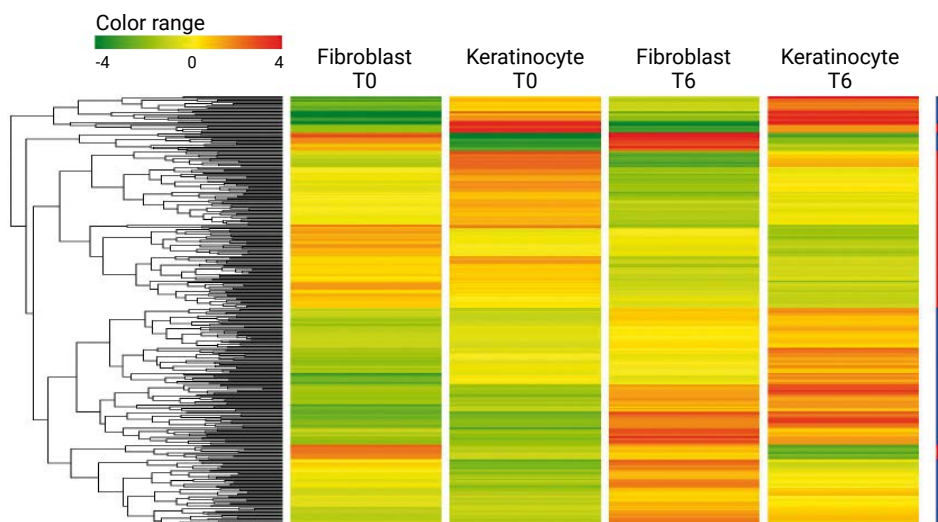
**PLANT USED:** white truffle (*Tuber magnatum* Pico) from the Alba area, Italy.

**TECHNOLOGY:** Bioliquefaction Technology.

**SUGGESTED CONCENTRATION OF USE:** 1% w/w.

**ORGANIC STATUS:** COSMOS approved.

**CHINA STATUS:** the product is China listed.



Graphic representation of the epigenetic investigation on keratinocytes and fibroblast treated with W Tr-Active 1% w/w

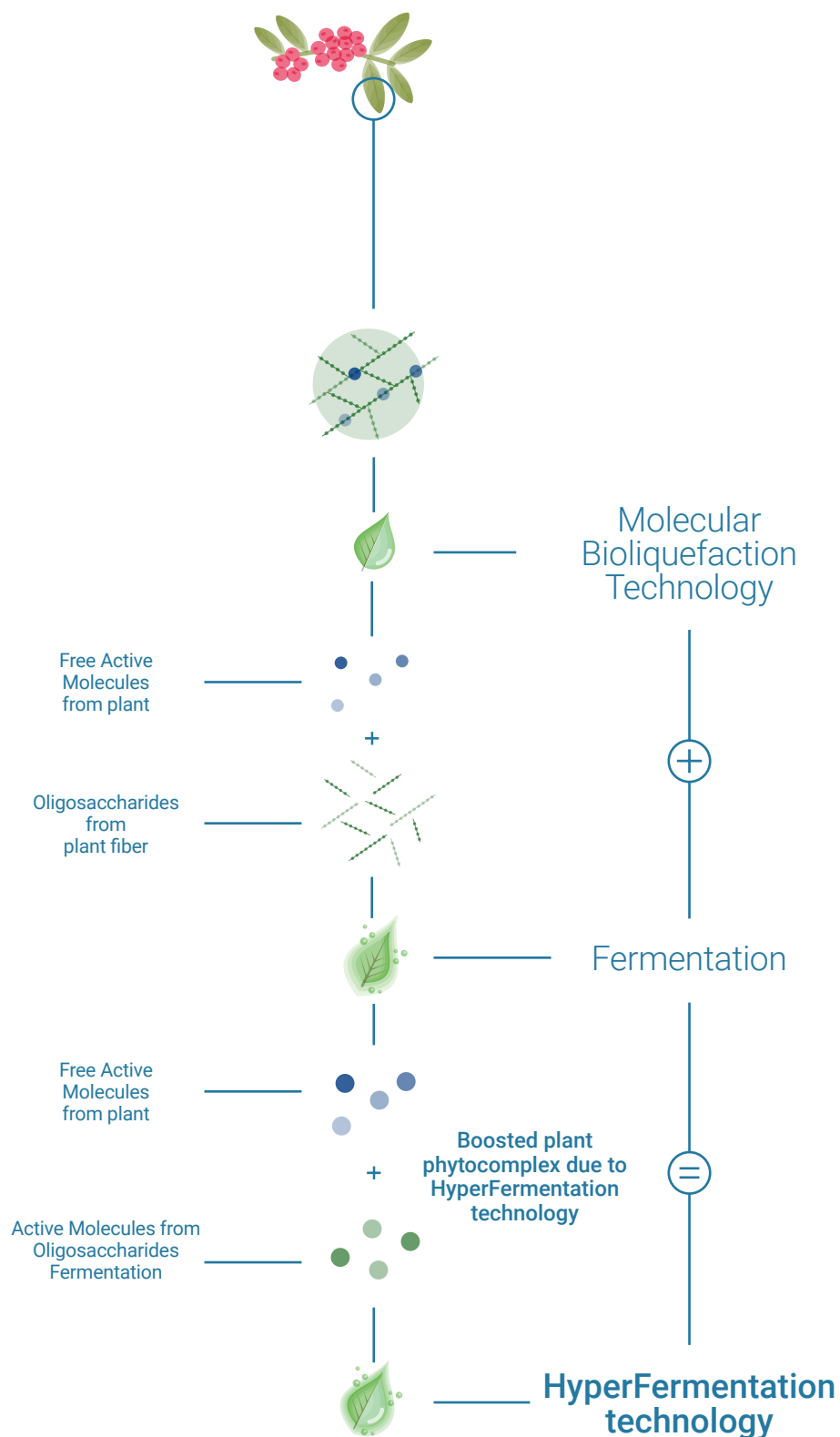




# HYPERFERMENTED

Upgrading the traditional fermentation  
to boost the efficacy of plants.

## OUR HYPERFERMENTATION TECHNOLOGY



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## HYPERFERMENTED

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In the cosmetics raw materials sector, fermentation is a transformation process of great potential interest since it can exploit a micro-organism to produce innovative active ingredients.

For thousands of years, fermentation has provided many cultures with the means of transforming food, increasing its nutritional value, preservability and bioavailability. One of the most detailed agricultural tests from ancient times is Columella's *De Re Rustica* (On Rural Affairs, 65 AD), on farming and fermentation connected with wine-making: this work summarizes everything the Romans knew about agriculture.

This millennia-old know how, typical of the Mediterranean area, combined with the latest biotechnologies at our disposal, has made it possible to develop a new and important production process:

**HYPERFERMENTATION TECHNOLOGY (Bioliquefaction + Fermentation)** the phytocomplex naturally contained in the plant is reinforced thanks to fermentation, transforming the inert fibres into even more active ingredients.

Over 400 plants and part of plants (see list on page 51) are available in our FERMENTED EXTRACTS line, all produced on-demand to guarantee the best preservation of the active molecules as well as the crisp freshness due to the excellence of the plant material used.

Because FERMENTED EXTRACTS are water-based products, they are very easy to use and can be added to the water phase of any formulation either before or after the heating phase.

All the products in this line can be used in organic certified cosmetic formulations.

### FERMENTED EXTRACTS

**Typical INCI name:** aqua, [name of the plant] extract, *Saccharomyces ferment* lysate filtrate, citric acid, sodium benzoate, potassium sorbate.





# EXTRACTS AND CENTRIFUGED

Over 1700 plant derived  
cosmetic ingredients produced  
through environmental friendly  
physical processes.

## ACTIVE WATER EXTRACTS

The best available plants from selected suppliers are subjected to gentle water extraction to obtain rich and crisply fragrant liquids ideal to produce up-to-date, effective cosmetic formulations.

Over 400 plants and part of plants (see list on page 51) are available in our ACTIVE WATER EXTRACTS line, all produced on-demand to guarantee the best preservation of the active molecules as well as the crisp freshness due to the excellence of the plant material used.

Because ACTIVE WATER EXTRACTS are water-based products, they are very easy to use and can be added to the water phase of any formulation either before or after the heating phase.

No chemical solvent is used in any step of production, making the products completely safe and also environmentally friendly as all by-products generated during the production processes have a low impact on the environment. Using water is also beneficial for the environment because it has zero impact compared to the production and transportation of traditional solvents. All the products in this line can be used in organic certified cosmetic formulations.

### ACTIVE WATER EXTRACTS

**Typical INCI name:** aqua, [name of the plant] extract, citric acid, sodium benzoate, potassium sorbate.

## PRESERVATIVE-FREE EXTRACTS

After many years of in-house research, we succeeded in developing a production process that makes it possible to obtain extremely stable and safe preservative-free products, ensuring a microbial load < 100 CFU in the cosmetic ingredient.

Our PRESERVATIVE-FREE EXTRACTS line combines the needs for naturalness and total absence of preservatives and chemical derivatives of the latest trends in cosmetics, with the reliability and quality of a microbiologically stable and safe product.

Over 400 plants and part of plants (see list on page 51) are available in our PRESERVATIVE-FREE EXTRACTS line, all produced on-demand to guarantee the best preservation of the active molecules as well as

the crisp freshness due to the excellence of the plant material used.

The PRESERVATIVE-FREE EXTRACTS are produced using non-palm derived glycerine. No chemical solvent is used in any step of production, making the products completely safe and also environmentally friendly as all by-products generated during the production processes have a low impact on the environment.

All the products in this line can be used in organic certified cosmetic formulations.

### PRESERVATIVE-FREE EXTRACTS

**Typical INCI name:** glycerin, [name of the plant] extract, aqua, citric acid.



## ACTIVE LIPO EXTRACTS

The ACTIVE LIPO EXTRACTS line fulfils any need for oil-soluble extracts. Based on sunflower oil and stabilized with natural tocopherol, it is an ideal option for all water-free formulations.

Over 400 plants and part of plants (see list below) are available in our ACTIVE LIPO EXTRACTS line, all produced on-demand to guarantee the best preservation of the active molecules as well as the crisp freshness due to the excellence of the plant material used.

No chemical solvent is used in any step of production,

making the products completely safe and also environmentally friendly as all by-products generated during the production processes have a low impact on the environment.

All the products in this line can be used in organic certified cosmetic formulations.

### ACTIVE LIPO EXTRACTS

**Typical INCI name:** helianthus annuus seed oil, [name of the plant] extract, tocopherol.

### LIST OF PLANTS AVAILABLE FOR:

Active Water Extracts line | Preservative Free Extracts line | Active Lipo Extracts line  
Fermented Extracts line

Botanical name	Part of the plant	Common name
<i>Achillea millefolium</i>	Aerial Part with flower	Yarrow
<i>Acorus calamus</i>	Rhizome	Sweet flag
<i>Adansonia digitata</i>	Fruit	Baobab
<i>Adiantum capillus-veneris</i>	Weed	Southern maidenhair fern
<i>Aesculus Hippocastanum</i>	Leaf	Horse chestnut
<i>Aesculus Hippocastanum</i>	Bark	Horse chestnut
<i>Aesculus Hippocastanum</i>	Seed	Horse chestnut
<i>Aframomum Melegueta</i>	Seed	Ossame
<i>Agave Tequilana</i>	Stem	Agave
<i>Agrimonia eupatoria</i>	Aerial Part	Common agrimony
<i>Agropyron Repens</i>	Rhizome	Couchgrass
<i>Alchemilla vulgaris</i>	Weed	Lady's mantle
<i>Alkanna tinctoria</i>	Root	Dyer's Alkanet
<i>Allium cepa</i>	Bulb	Red onion
<i>Allium cepa</i>	Bulb	Onion
<i>Allium sativum</i>	Bulb	Garlic
<i>Allium ursinum</i>	Leaf	Ramsons
<i>Aloe ferox</i>	Leaf	Aloe ferox
<i>Alpinia officinarum</i>	Rhizome	Lesser galangal
<i>Althaea officinalis</i>	Leaf	Marshmallow
<i>Althaea officinalis</i>	Root	Marshmallow
<i>Althaea rosea</i>	Flower	Marshmallow
<i>Ammi visnaga</i>	Fruit	Ammi Visnaga
<i>Amorphophallus konjac</i>	Root	Konjac
<i>Ananas sativus</i>	Fruit	Pineapple
<i>Andrographis paniculata</i>	Weed	Andrographis paniculata
<i>Anemopaegma mirandum</i>	Bark	Catuaba
<i>Anethum graveolens</i>	Fruit	Dill
<i>Angelica archangelica</i>	Root	Angelica
<i>Antennaria Dioica</i>	Flower	Mountain everlasting

Botanical name	Part of the plant	Common name
<i>Anthemis nobilis</i>	Flower	Roman Chamomile
<i>Anthriscus cerefolium</i>	Aerial Part	Chervil
<i>Apium Graveolens</i>	Leaf	Celery
<i>Apium Graveolens</i>	Root	Celery
<i>Arbutus unedo</i>	Fruit	Strawberry tree fruit
<i>Arbutus unedo</i>	Leaf	Strawberry tree leaf
<i>Arctium lappa</i>	Leaf	Greater burdock
<i>Arctium lappa</i>	Root	Greater burdock
<i>Arctostaphylos Uva - Ursi</i>	Leaf	Bearberry
<i>Aronia melanocarpa</i>	Berry	Aronia
<i>Artemisia abrotanum</i>	Aerial Part	Southernwood
<i>Artemisia absinthium</i>	Aerial Part with flower	Absinthe wormwood
<i>Artemisia dracunculus</i>	Leaf	Tarragon
<i>Artemisia umbelliformis</i>	Aerial Part	Genepi
<i>Artemisia vulgaris</i>	Aerial Part	Common mugwort
<i>Aspalathus Linearis</i>	Leaf	Rooibos
<i>Asparagus officinalis</i>	Root	Asparagus
<i>Astragalus membranaceus</i>	Root	Mongolian milkvetch
<i>Avena sativa</i>	Seeds	Oat
<i>Avena sativa</i>	Bran	Oat bran
<i>Azadirachta indica</i>	Leaf	Neem
<i>Backhousia Anisata</i>	Leaf	Backhousia Anisata
<i>Baptisia tinctoria</i>	Root	Wild indigo
<i>Barosma betulina</i>	Leaf	Agathosma betulina
<i>Bellis Perennis</i>	Flower	Daisy
<i>Bentonite</i>		White clay
<i>Berberis Aquifolium</i>	Bark	Berberis Aquifolium
<i>Berberis vulgaris</i>	Bark	Common barberry
<i>Berberis vulgaris</i>	Bark	Berberis
<i>Beta Vulgaris</i>	Root	Beetroot

Botanical name	Part of the plant	Common name
<i>Beta Vulgaris</i>		White sugar
<i>Betula alba</i>	Leaf	Birch
<i>Betula pendula</i>	Sap	Birch sap
<i>Bixa orellana</i>	Seed	Bixa orellana
<i>Borago officinalis</i>	Aerial Part with Flower	Borage
<i>Boswellia serrata</i>	Gum / Resin	Boswellia
<i>Brassica Alba</i>	Seed	Wild mustard
<i>Brassica Nigra</i>	Seed	Black mustard
<i>Brassica oleracea acephala</i>	Plant	Kale
<i>Bulnesia Sarmientoi</i>	Wood	Verawood
<i>Buxus sempervirens</i>	Leaf	Common box
<i>Caesalpinia echinata</i>	Bark	Caesalpinia
<i>Calamintha Officinalis</i>	Leaf	Lesser calamint
<i>Calendula officinalis</i>	Flower	Pot marigold
<i>Calluna vulgaris</i>	Flower	Heather
<i>Camellia sinensis</i>	Leaf	Green tea
<i>Camellia sinensis</i>	Leaf	Black tea
<i>Camellia sinensis</i>	Leaf	White tea
<i>Cannabis sativa</i>	Seed	Hemp
<i>Capsella bursa-pastoris</i>	Weed	Shepherd's purse
<i>Capsicum Annuum Var. Grossum</i>	Fruit	Sweet paprika
<i>Capsicum Annuum Var. Longum</i>	Fruit	Strong paprika
<i>Capsicum Frutescens</i>	Fruit	Cayenne pepper
<i>Carica Papaya</i>	Fruit	Papaya
<i>Carica Papaya</i>	Leaf	Papaya leaf
<i>Carlina acaulis</i>	Root	Stemless carline thistle
<i>Carthamus tinctorius</i>	Flower	Safflower
<i>Carum carvi</i>	Fruit	Caraway
<i>Cassia Angustifolia</i>	Leaf	Indian Senna
<i>Cassia fistula</i>	Fruit	Golden rain tree
<i>Cassia Italica</i>	Leaf	Neutral Hina
<i>Castanea sativa</i>	Leaf	Chestnut
<i>Castanea sativa</i>	Bark	Chestnut
<i>Centaurea cyanus</i>	Flower	Cornflower
<i>Centaurium erythraea</i>	Aerial Part	Common centaury
<i>Centella asiatica</i>	Weed	Centella
<i>Ceratonia siliqua</i>	Hull	Carrob fruit
<i>Cetraria Islandica</i>	Thallus	Iceland moss
<i>Chamomilla recutita</i>	Flower	Chamomile
<i>Charcoal</i>		Charcoal
<i>Chelidonium majus</i>	Aerial Part	Greater celandine
<i>Chenopodium Quinoa</i>	Seed	Quinoa
<i>Chlorella pyrenoidosa</i>	Thallus	Chlorella pyrenoidosa
<i>Chondrus Crispus</i>	Thallus	Irish moss
<i>Chondrus crispus</i>	Thallus	Chondrus crispus
<i>Chrysanthemum parhenium</i>	Aerial Part	Feverfew
<i>Chrysanthemum balsamita</i>	Weed	Costmary
<i>Cicer Arietinum</i>	Seed	Chickpeas
<i>Cichorium intybus</i>	Root	Common Chicory
<i>Cimicifuga racemosa</i>	Rhizome	Black cohosh

Botanical name	Part of the plant	Common name
<i>Cinchona calisaya</i>	Bark	Cinchona calisaya
<i>Cinchona succirubra</i>	Bark	Cinchona
<i>Cinnamomum zeylanicum</i>	Bark	Cinnamon
<i>Citrullus Lanatus</i>	Fruit	Watermelon
<i>Citrus Aurantifolia</i>	Peel	Lime
<i>Citrus aurantium amara</i>	Fruit	Bitter orange
<i>Citrus aurantium bergamia</i>	Peel	Bergamot
<i>Citrus aurantium</i>	Fruit	Blood orange
<i>Citrus aurantium</i>	Leaf	Orange
<i>Citrus aurantium</i>	Flower	Orange
<i>Citrus Limon</i>	Peel	Lemon
<i>Citrus Limon</i>	Leaf	Lemon
<i>Citrus medica vulgaris</i>	Fruit	Citron fruit
<i>Citrus medica vulgaris</i>	Bark	Citron bark
<i>Citrus Nobilis</i>	Peel	Mandarin orange
<i>Citrus Paradisi</i>	Seed	Grapefruit
<i>Cochlearia armoracia</i>	Root	Horseradish
<i>Cochlearia officinalis</i>	Weed	Common scurvygrass
<i>Cocos nucifera</i>	Fruit	Coconut milk
<i>Coffea Arabica</i>	Seed	Green coffee
<i>Coffea Arabica</i>	Seed	Coffee
<i>Cola Nitida</i>	Seed	Kola
<i>Combretum micranthum</i>	Leaf	Kinkeliba
<i>Commiphora Myrrha</i>	Gum / Resin	Myrrh
<i>Convolvulus Arvensis</i>	Weed	Small With-Weed
<i>Coriandrum sativum</i>	Fruit	Coriander
<i>Corylus Avellana</i>	Leaf	Hazel
<i>Crataegus oxyacantha</i>	Flower	Hawthorn
<i>Crataegus oxyacantha</i>	Berry	Hawthorn
<i>Crithmum maritimum</i>	Weed	Samphire
<i>Crocus Sativus</i>	Stigma	Saffron
<i>Cucumis melo</i>	Fruit	White melon
<i>Cucumis melo</i>	Fruit	Melon
<i>Cucurbita Pepo</i>	Seed	Pumpkin
<i>Cuminum cyminum</i>	Fruit	Cumin
<i>Cupressus sempervirens</i>	Berry	Mediterranean cypress
<i>Curcuma longa</i>	Rhizome	Curcuma/Turmeric
<i>Curcuma Zedoaria</i>	Rhizome	Zedoary
<i>Cymbopogon citratus</i>	Leaf	Lemongrass
<i>Cynara scolymus</i>	Leaf	Artichoke
<i>Daemonorops Draco</i>	Resin	Dragoon's Blood
<i>Dahlia variabilis</i>	Flower	Dahlia
<i>Daucus carota</i>	Fruit	Carrot
<i>Dendrobium nobile</i>	Flower	Orchid
<i>Desmodium adscendens</i>	Leaf	Desmondium
<i>Dipteyx odorata</i>	Seed	Tonka beans
<i>Drosera ramentacea</i>	Weed	Sundews
<i>Dryopteris filix-mas</i>	Rhizome	Male fern
<i>Echinacea angustifolia</i>	Weed	Echinacea angustifolia
<i>Echinacea pallida</i>	Root	Pale purple coneflower
<i>Elettaria cardamomum</i>	Seed	Cardamom

Botanical name	Part of the plant	Common name
<i>Eleutherococcus senticosus</i>	Root	Siberian ginseng
<i>Epilobium angustifolium</i>	Weed	Epilobium angustifolium
<i>Epilobium parviflorum</i>	Weed	Epilobium parviflorum
<i>Equisetum arvense</i>	Weed	Horsetail
<i>Eschscholtzia californica</i>	Weed	California poppy
<i>Eucalyptus globulus</i>	Leaf	Eucalyptus
<i>Eugenia Caryophyllus</i>	Clove	Clove
<i>Eupatorium cannabinum</i>	Weed	Hemp-Agrimony
<i>Euphrasia officinalis</i>	Aerial Part	Eyebright
<i>Euterpe Oleracea</i>	Berry	Açaí
<i>Evernia Prunastri</i>	Thallus	Oakmoss
<i>Ferula assa foetida</i>	Gum	Ferula assa foetida
<i>Ficus carica</i>	Fruit	Fig
<i>Foeniculum vulgare</i>	Aerial Part	Fennel
<i>Foeniculum vulgare</i>	Fruit	Fennel
<i>Foeniculum vulgare</i>	Root	Fennel
<i>Fragaria vesca</i>	Leaf	Wild strawberry
<i>Frangula alnus</i>	Bark	Buchthorn
<i>Fraxinus excelsior</i>	Leaf	Ash
<i>Fraxinus excelsior</i>	Bark	Ash
<i>Fraxinus Ornus</i>	Cannula	Manna
<i>Fucus vesiculosus</i>	Thallus	Fucus
<i>Fumaria officinalis</i>	Aerial Part	Common fumitory
<i>Galega officinalis</i>	Weed	Galega
<i>Galium aparine</i>	Weed	Cleavers
<i>Galium odoratum</i>	Leaf	Sweetscented bedstraw
<i>Galium verum</i>	Weed	Lady's bed straw
<i>Garcinia cambogia</i>	Fruit	Garcinia cambogia
<i>Gaultheria procumbens</i>	Leaf	Eastern teaberry
<i>Gelidium amansii</i>	Thallus	AGAR AGAR
<i>Gentiana acaulis</i>	Flower - Leaf	Stemless gentian
<i>Gentiana lutea</i>	Root	Great yellow gentian
<i>Geranium robertianum</i>	Aerial Part	Herb-Robert
<i>Geum urbanum</i>	Root	Wood avens
<i>Ginkgo biloba</i>	Leaf	Ginkgo
<i>Glechoma hederacea</i>	Aerial Part	Ground-ivy
<i>Glycine Max</i>	Seed	Soybean
<i>Glycyrrhiza Glabra</i>	Root	Liquorice
<i>Gossypium herbaceum</i>	Aerial Part	Cotton
<i>Grindelia Robusta</i>	Aerial Part	Grindelia Robusta
<i>Gymnema Sylvestre</i>	Leaf	Gymnema Sylvestre
<i>Gynostemma Pentaphyllum</i>	Weed	Gynostemma Pentaphyllum
<i>Haematoxylon campechianum</i>	Bark	Blackwood
<i>Hamamelis virginiana</i>	Leaf	Common witch-hazel
<i>Hamamelis virginiana</i>	Bark	Common witch-hazel
<i>Harpagophytum procumbens</i>	Root	Devil's claw
<i>Hedera helix</i>	Leaf	Ivy
<i>Helianthus annuus</i>	Seed	Sunflower
<i>Helianthus annuus</i>	Petal	Sunflower
<i>Helichrysum italicum</i>	Aerial Part	Helichrysum
<i>Helichrysum stoechas</i>	Flower	Helichrysum stoechas

Botanical name	Part of the plant	Common name
<i>Heracleum Sphondylium</i>	Weed	Hogweed
<i>Herniaria glabra</i>	Aerial Part	Smooth rupturewort
<i>Heterotheca inuloides</i>	Flower	Arnica
<i>Hibiscus Sabdariffa</i>	Flower	Roselle
<i>Hieracium Pilosella</i>	Weed	Mouse ear hawkweed
<i>Hippophae Rhamnoides</i>	Fruit	Common sea buckthorn
<i>Hordeum Vulgare</i>	Seed	Barley
<i>Humulus Lupulus</i>	Flower	Hop
<i>Hydrastis Canadensis</i>	Rhizome	Goldenseal
<i>Hypericum Perforatum</i>	Aerial Part	Common St. John's wort
<i>Hyssopus Officinalis</i>	Aerial Part	Hyssop
<i>Ilex aquifolium</i>	Leaf	Holly
<i>Illicium verum</i>	Fruit	Star anise
<i>Indigofera Tinctoria</i>	Leaf	Indigofera Tinctoria
<i>Inula helenium</i>	Root	Elecampane
<i>Iris germanica</i>	Rhizome	German Iris
<i>Jasminum officinale</i>	Flower	Jasmine
<i>Juglans Regia</i>	Seed	Walnut
<i>Juglans Regia</i>	Leaf	Walnut
<i>Juniperus communis</i>	Berry	Juniper
<i>Kigelia Africana</i>	Fruit	Kigelia africana
<i>Krameria Triandra</i>	Root	Rhatany
<i>Laminaria Cloustoni</i>	Thallus	Laminaria
<i>Lamium Album</i>	Aerial Part	Lamium Album
<i>Laurus nobilis</i>	Berry	Laurel
<i>Laurus nobilis</i>	Leaf	Laurel
<i>Lavandula Angustifolia</i>	Flower	Lavender
<i>Lavandula Hybrida</i>	Flower	Lavandula Hybrida
<i>Lavandula Hybrida</i>	Aerial part with flower	Lavandula Hybrida
<i>Lawsonia Inermis</i>	Leaf	Red Hina
<i>Lepidium Meyenii</i>	Root	Maca
<i>Lespedeza Capitata</i>	Leaf	Lespedeza Capitata
<i>Levisticum Officinale</i>	Root	Lovage
<i>Lilium candidum</i>	Bulb	Lilium
<i>Linum Usitatissimum</i>	Seed	Linseed
<i>Lippia Citriodora</i>	Leaf	Lemon verbena
<i>Litchi chinensis</i>	Fruit	Litchi
<i>Lithospermum Officinale</i>	Aerial Part	Common gromwell
<i>Lonicera caprifolium</i>	Aerial Part	Honeysuckle
<i>Lupinus Albus</i>	Seed	Lupin
<i>Lycium barbarum</i>	Berry	Boxthorn
<i>Lycopodium Clavatum</i>	Weed	Common club moss
<i>Lythrum Salicaria</i>	Aerial Part	Purple loosestrife
<i>Magnolia Officinalis</i>	Bark	Houpu magnolia
<i>Malva Sylvestris</i>	Flower - Leaf	Mallow
<i>Mangifera indica</i>	Fruit	Mango
<i>Marrubium Vulgare</i>	Aerial Part	White Horehound
<i>Marsdenia condurango</i>	Bark	Condurango
<i>Medicago sativa</i>	Weed with flower	Alfalfa
<i>Melilotus Officinalis</i>	Aerial Part with Flower	Yellow Sweet clover
<i>Melissa Officinalis</i>	Leaf	Lemon Balmint
<i>Mentha lonfigolia</i>	Aerial Part	Horsemint
<i>Mentha Piperita</i>	Leaf	Peppermint

Botanical name	Part of the plant	Common name
<i>Mentha Viridis</i>	Leaf	Spearmint
<i>Menyanthes Trifoliata</i>	Leaf	Buckbean
<i>Mimosa Tenuiflora</i>	Bark	Mimosa Tenuiflora
<i>Momordica cochinchinensis</i>	Seed	Gak
<i>Montmorillonite</i>		Green clay
<i>Moringa oleifera</i>	Leaf	Moringa
<i>Moroccan lava Clay</i>		Red clay
<i>Morus nigra</i>	Leaf	Black mulberry
<i>Myrciaria Dubia</i>	Fruit	Camu camu
<i>Myristica Fragrans</i>	Seed	Nutmeg
<i>Myristica Fragrans</i>	Aril / Kernel	Mace
<i>Myrtus Communis</i>	Leaf	Myrtle
<i>Myrtus Communis</i>	Berry	Myrtle
<i>Nasturtium Officinale</i>	Weed	Garden nasturtium / Watercress
<i>Nepeta Cataria</i>	Aerial Part	Catnip
<i>Nigella Sativa</i>	Seed	Black Caraway
<i>Nymphaea Lotus</i>	Root	Water Lily
<i>Ocimum basilicum</i>	Leaf	Basil
<i>Olea Europaea</i>	Leaf	Olive
<i>Olea Europaea</i>	Fruit	Olive
<i>Ononis Spinosa</i>	Root	Spiny retharrow
<i>Opuntia ficus indica</i>	Flower	prickly pear
<i>Origanum Majorana</i>	Leaf	Marjoram
<i>Origanum Vulgare</i>	Leaf	Origan
<i>Orthosiphon Stamineus</i>	Leaf	Ortosiphon
<i>Oxalis acetosella</i>	Leaf	Wood sorrel
<i>Paeonia Officinalis</i>	Petal	Peony
<i>Panax ginseng</i>	Root	Red Ginseng
<i>Panax ginseng</i>	Root	Ginseng
<i>Panicum Miliaceum</i>	Fruit	Proso millet
<i>Papaver Nigrum Var. Glabrum</i>	Seed	Opium poppy / Breadseed poppy
<i>Papaver Rhoeas</i>	Flower	Red Poppy
<i>Parietaria officinalis</i>	Aerial part	Lichwort
<i>Passiflora Incarnata</i>	Aerial part	Purple passionflower
<i>Paullinia Cupana</i>	Seed	Guaranà
<i>Pelargonium graveolens</i>	Aerial Part	Geranium
<i>Perilla Frutescens</i>	Leaf	Perilla
<i>Persea Gratissima</i>	Fruit	Avocado
<i>Petroselinum Crispum</i>	Fruit	Parsley
<i>Peumus boldus</i>	Leaf	Boldo
<i>Pfaffia Paniculata</i>	Root	Suma
<i>Phaseolus vulgaris</i>	Hull	Bean
<i>Phaseolus vulgaris</i>	Hull	Green Beans
<i>Phoenix Dactylifera</i>	Fruit	Phoenix canariensis
<i>Phyllanthus emblica</i>	Fruit	Emblc
<i>Physalis alkekengi</i>	Fruit	Bladder cherry
<i>Picea abies</i>	Cone / Pine	Norway spruce
<i>Pimenta Officinalis</i>	Fruit	Allspice / Pimento
<i>Pimpinella Saxifraga</i>	Weed	Burnet saxifrage
<i>Pinus Sylvestris</i>	Bud / Sputs	Pine
<i>Piper Cubeba</i>	Fruit	Cubeb pepper / Tailed pepper

Botanical name	Part of the plant	Common name
<i>Piper Longum</i>	Fruit	Long pepper
<i>Piper Nigrum</i>	Fruit	White pepper
<i>Piper Nigrum</i>	Fruit	Green pepper
<i>Piper Nigrum</i>	Fruit	Black pepper
<i>Plantago lanceolata</i>	Leaf	Broadleaf plantain
<i>Plantago Psyllium</i>	Seed	Plantain
<i>Pogostemon Cablin</i>	Leaf	Patchouli
<i>Polygala Senega</i>	Root	Milk worts
<i>Polygonum aviculare</i>	Weed	Common knotgrass
<i>Polygonum bistorta</i>	Rhizome	Bistort
<i>Polypodium Vulgare</i>	Rhizome	Polypody
<i>Populus Nigra</i>	Bud / Sputs	Black poplar
<i>Populus Nigra</i>	Wood	Black poplar
<i>Portulaca Oleracea</i>	Weed	Common purslane
<i>Potentilla Erecta</i>	Rhizome	Tormentil
<i>Pouteria Lucuma</i>	Fruit	Lucuma
<i>Primula Officinalis</i>	Flower	Cowslip
<i>Prunus africana</i>	Bark	Prunus africana
<i>Prunus amygdalus Communis Var. Dulcis</i>	Seed	Sweet Almond
<i>Prunus cerasus</i>	Fruit	Sour cherry
<i>Prunus Spinosa</i>	Flower	Blackthorn
<i>Psidium guajava</i>	Fruit	Guava
<i>Pterocarpus Soyauxii</i>	Wood	African padauk
<i>Ptychopetalum Olacoides</i>	Wood	Muiru puama
<i>Pueraria Lobata</i>	Root	Kudzu
<i>Pulmonaria Officinalis</i>	Leaf	Lungwort
<i>Punica Granatum</i>	Peel	Pomegranate
<i>Pyrus communis</i>	Fruit	Pear
<i>Pyrus Malus</i>	Fruit	Apple
<i>Quassia Amara</i>	Wood	Bitterwood
<i>Quercus Infectoria</i>	Seed	Gall oak
<i>Quercus Petraea</i>	Bark	Sessile oak
<i>Quillaja Saponaria</i>	Bark	Soapbark
<i>Raphanus Sativus Var. Niger</i>	Root	Radish
<i>Reseda Luteola</i>	Aerial Part	Dyer's Rocket
<i>Rhamnus purshiana</i>	Bark	Cascara buckthorn
<i>Rheum Rhaponticum</i>	Rhizome	Rhubarb
<i>Rhodiola Rosea</i>	Root	Rhodiola Rosea
<i>Rhododendron Ferrugineum</i>	Leaf	Rose Bay
<i>Ribes Nigrum</i>	Fruit	Black currant
<i>Ribes Nigrum</i>	Leaf	Black currant
<i>Robinia pseudoacacia</i>	Flower	Black locust
<i>Rosa Canina</i>	Fruit	Hip rose
<i>Rosa Centifolia</i>	Petal	Provence rose
<i>Rosa Gallica</i>	Flower	French rose
<i>Rosmarinus Officinalis</i>	Leaf	Rosemary
<i>Rubia Tinctorum</i>	Root	Madder
<i>Rubus Fruticosus</i>	Leaf	Blackberry
<i>Rubus Idaeus</i>	Fruit	Raspberry
<i>Rubus Idaeus</i>	Leaf	Raspberry

Botanical name	Part of the plant	Common name
<i>Rumex acetosa</i>	Weed	Sorrel
<i>Rumex Crispus</i>	Root	Curled Dock
<i>Ruscus Aculeatus</i>	Rhizome	Butcheerbroom
<i>Ruta Graveolens</i>	Aerial Part	Rue
<i>Saccharum Officinatum</i>		Brown sugar
<i>Salix Alba</i>	Bark	White willow
<i>Salix Purpurea</i>	Bark	Red willow
<i>Salvia hispanica</i>	Seed	Chia
<i>Salvia Officinalis</i>	Leaf	Sage
<i>Salvia Sclarea</i>	Aerial Part with Flower	Clary sage
<i>Sambucus Nigra</i>	Flower	Elder
<i>Sambucus Nigra</i>	Berry	Elder
<i>Sambucus Nigra</i>	Wood	Elder
<i>Sanguinaria Canadensis</i>	Root	Blood Root
<i>Santalum Album</i>	Wood	Sandalwood
<i>Sapindus Mukurossi</i>	Fruit	Soapberries
<i>Saponaria Officinalis</i>	Root	Soap Wort
<i>Sassafras Albidum</i>	Wood	Sassafras
<i>Satureja Hortensis</i>	Aerial Part	Savory
<i>Satureja montana</i>	Leaf	Winter savory
<i>Schinus Molle</i>	Fruit	Pink pepper / American pepper
<i>Schizandra Chinensis</i>	Fruit	Schizandra Chinensis
<i>Scrophularia Nodosa</i>	Aerial Part	Figwort
<i>Scutellaria Lateriflora</i>	Weed	Scutellaria Lateriflora
<i>Serenia Serrulata</i>	Fruit	Saw palmetto
<i>Sesamum Indicum</i>	Seed	Sesame
<i>Silybum marianum</i>	Fruit	Cardus marianus
<i>Sisymbrium officinale</i>	Aerial Part	Hedge mustard
<i>Smilax Medica</i>	Root	Mexican Sarsapareille
<i>Solanum dulcamara</i>	Stipe	Bittersweet
<i>Solanum Lycopersicum</i>	Fruit	Tomato
<i>Solanum Tuberosum</i>	Root	Potato
<i>Solidago Virga-Aurea</i>	Aerial Part with Flower	European goldenrod
<i>Spartium junceum</i>	Flower	Spanish broom
<i>Spergularia rubra</i>	Aerial Part	Red sand spurry
<i>Spinacia Oleracea</i>	Leaf	Spinach
<i>Spirea ulmaria</i>	Flower	Drop Wort
<i>Spirea ulmaria</i>	Aerial Part	Drop Wort
<i>Spirulina Platensis</i>	Thallus	Spirulina Platensis
<i>Stachys officinalis</i>	Weed	Common hedgenettle
<i>Stevia rebaudiana</i>	Aerial Part	Stevia
<i>Symphytum officinale</i>	Root	Comfrey
<i>Syringa vulgaris</i>	Flower	Lilac
<i>Tabebuia Avellanedae</i>	Bark	Tabebuia
<i>Tamarindus Indica</i>	Fruit	Tamarind
<i>Tanacetum cinerariifolium</i>	Flower	Mums
<i>Tanacetum Vulgare</i>	Aerial Part	Tansy
<i>Taraxacum Officinale</i>	Root	Dandelion
<i>Taraxacum Officinale</i>	Leaf	Dandelion
<i>Terminalia Chebula</i>	Fruit	Black myrobalan
<i>Theobroma cacao</i>	Seed	Cocoa
<i>Thuja Occidentalis</i>	Leaf	Thuja

Botanical name	Part of the plant	Common name
<i>Thymus Capitatus</i>	Leaf	Spanish Origanum
<i>Thymus Serpyllum</i>	Leaf	Wild thyme
<i>Thymus Vulgaris</i>	Leaf	Thyme
<i>Tilia Cordata</i>	Flower	Linden cordata
<i>Tilia Platyphyllos</i>	Flower	Linden
<i>Trifolium Pratense</i>	Flower	Red Clover
<i>Trigonella foenum graecum</i>	Berry	Fenugreek
<i>Triticum aestivum</i>	Germ	Wheat germ
<i>Turnera diffusa</i>	Leaf	Damiana
<i>Tussilago farfara</i>	Leaf	Tussilago farfara
<i>Tussilago farfara</i>	Flower	Tussilago farfara
<i>Ulmus Campestris</i>	Bark	Field helm
<i>Uncaria Tomentosa</i>	Bark	Uncaria Tomentosa
<i>Undaria Pinnatifida</i>	Weed	Undaria
<i>Urtica Dioica</i>	Leaf	Nettle
<i>Urtica Dioica</i>	Root	Nettle
<i>Vaccinium Macrocarpon</i>	Fruit	Cranberry
<i>Vaccinium Myrtillus</i>	Leaf	Bilberry
<i>Vaccinium Myrtillus</i>	Berry	Bilberry
<i>Valeriana Officinalis</i>	Root	Valerian
<i>Vanilla Planifolia</i>	Fruit	Vanilla
<i>Verbascum Thapsus</i>	Leaf	Mullein
<i>Verbascum Thapsus</i>	Flower	Mullein
<i>Verbena Officinalis</i>	Aerial Part	Verbena Officinalis
<i>Veronica Officinalis</i>	Aerial Part	Fluellen
<i>Viburnum Prunifolium</i>	Bark	Snowball
<i>Vinca Minor</i>	Aerial Part	Lesser piriwinkle
<i>Viola Odorata</i>	Flower	Viola odorata / Sweet violet
<i>Viola Tricolor</i>	Flower	Pansy
<i>Viscum Album</i>	Leaf - Sprig	Mistletoe
<i>Vitex agnus castus</i>	Fruit	Vitex
<i>Vitis Vinifera</i>	Leaf	Grape
<i>Withania Somnifera</i>	Root	Winter-cherry
<i>Zanthoxylum Piperitum</i>	Fruit	Prickly Ash / Japanese pepper
<i>Zea Mays</i>	Fruit	Corn
<i>Zea Mays</i>	Stigma	Corn
<i>Zingiber Officinale</i>	Rhizome	Ginger

#### OTHER EXTRACTS:

Beer
Champagne
Manuka honey
Muscat
Propolis
Mediterranean sea minerals
Sauvignon
Talc
Red wine

## ACTIVE WATER EXTRACTS BIO COSMOS

COSMOS  
CERTIFIED

The best organic certified plants are subjected to gentle water extraction to obtain rich and crisply fragrant liquids ideal for producing up-to-date, effective cosmetic formulations compliant with the COSMOS CERTIFIED standard.

Over 160 plants (see list below) are already available in our ACTIVE WATER EXTRACTS BIO COSMOS line, all produced on-demand to guarantee the best preservation of the active molecules as well as the crisp freshness due to the excellence of the plant material used.

The ACTIVE WATER EXTRACTS BIO COSMOS are water-based products, which means they are very easy to use and can be added to the water phase of any formulation either before or after the heating phase.

No chemical solvent is used in any step of the production, making the products completely safe and also environmentally friendly as all by-products generated during the production processes have a low impact on the environment. Using water is also beneficial for the environment because it has zero impact compared to the production and transportation of traditional solvents.

Our BIOEXTRACT 100 products are part of the ACTIVE WATER EXTRACTS BIO COSMOS therefore obtained according to the COSMOS CERTIFIED standard but specifically developed to allow cosmetic formulators to reach the required amount of organic certified ingredients in the final formulation with a pleasant, cost effective, natural, water-based ingredient.

### ACTIVE WATER EXTRACTS BIO COSMOS

**Typical INCI name:** aqua, [name of the plant] extract, citric acid, sodium benzoate, potassium sorbate.

### BIOEXTRACT 100

**Typical INCI name:** [name of the plant] extract, citric acid, sodium benzoate, potassium sorbate.

From the available organic certified plants also PRESERVATIVE FREE EXTRACTS ACTIVE LIPO EXTRACTS and FERMENTED EXTRACTS in a COSMOS CERTIFIED grade can be produced.

### LIST OF ORGANIC CERTIFIED PLANTS AVAILABLE FOR: Active Water Extracts BIO COSMOS line

Botanical name	Part of the plant	Common name
<i>Achillea millefolium</i>	Aerial part	Yarrow
<i>Actinidia chinensis</i>	Fruit	Kiwi
<i>Aesculus hippocastanum</i>	Seed	Horse chestnut
<i>Agrimonia eupatoria</i>	Aerial part	Common agrimony
<i>Alchemilla vulgaris</i>	Aerial part	Lady's mantle
<i>Allium ursinum</i>	Root	Ramsons
<i>Aloe barbadensis</i>	Leaf	Aloe Leaf
<i>Althaea officinalis</i>	Root	Marsh-mallow
<i>Anthriscus cerefolium</i>	Leaves	Garden Chervil
<i>Arctium lappa</i>	Root	Greater burdock root
<i>Arctium lappa</i>	Leaves	Greater burdock leaves
<i>Aristolelia chilensis</i>	Aerial part	Maqui
<i>Artemisia absinthium</i>	Leaves	Absinthe wormwood
<i>Aspalathus linearis</i>	Leaves	Red tea - Rooibos
<i>Avena sativa</i>	Aerial part	Oats
<i>Betula alba</i>	Leaves	Birch
<i>Calendula officinalis</i>	Flower	Pot marigold
<i>Calluna vulgaris</i>	Flower	Common heather
<i>Camellia sinensis</i>	Leaves	Green tea

Botanical name	Part of the plant	Common name
<i>Camellia sinensis</i>	Leaves	Black tea
<i>Carum carvi</i>	Seed	Caraway
<i>Castanea sativa</i>	Fruit	Chestnut
<i>Centaurea cyanus</i>	Flower	Cornflower
<i>Chamomilla recutita</i>	Flower	Chamomile
<i>Cinnamomum cassia</i>	Bark	Ceylon cinnamon
<i>Citrus aurantium amara/ Citrus aurantium dulcis</i>	Flower	Sweet/Bitter Orange flower
<i>Citrus aurantium dulcis</i>	Peel	Sweet Orange peel
<i>Citrus aurantium dulcis</i>	Fruit	Sweet Orange fruit
<i>Citrus grandis</i>	Fruit	Pink grapefruit
<i>Citrus limon</i>	Peel	Lemon
<i>Citrus limon</i>	Fruit	Lemon
<i>Cocos nucifera</i>	Fruit	Coconut
<i>Coffea arabica</i>	Seed	Coffee
<i>Coriandrum sativum</i>	Fruit	Coriander
<i>Corylus avellana</i>	Leaves	Hazel
<i>Crataegus oxyacantha</i>	Flower-Leaves	Hawthorn
<i>Cucumis sativus</i>	Fruit	Cucumber
<i>Curbita maxima</i>	Fruit	Pumpkin



Botanical name	Part of the plant	Common name
<i>Cynara scolymus</i>	Leaves	Artichoke
<i>Daucus carota</i>	Root	Carrots
<i>Echinacea pallida</i>	Root	Pale purple coneflower
<i>Equisetum arvense</i>	Herb	Horsetail
<i>Eucalyptus globulus</i>	Leaves	Tasmanian blue gum
<i>Foeniculum vulgare</i>	Seed	Fennel
<i>Fragaria vesca</i>	Fruit	Strawberries
<i>Frangula alnus</i>	Bark	Alder buckthorn
<i>Ginkgo biloba</i>	Leaves	Ginkgo
<i>Glycyrrhiza glabra</i>	Root	Licorice
<i>Hamamelis virginiana</i>	Leaves	Common witch-hazel
<i>Harpagophytum procumbens</i>	Root	Devil's caw
<i>Hedera Elix</i>	Leaves	Ivy
<i>Helianthus annuus</i>	Seed	Sunflower
<i>Helichrysum italicum</i>	Flower	Helichrysum
<i>Hibiscus sabdariffa</i>	Flower	Roselle
<i>Humulus lupulus</i>	Fruit	Hop
<i>Hypericum perforatum</i>	Aerial part	Common St. John's wort
<i>Hyssopus officinalis</i>	Flower-Leaves	Hyssop
<i>Iris pallida</i>	Rhizomes debarked	Dalmatian iris
<i>Juglans regia</i>	Leaves	Walnut
<i>Juniperus communis</i>	Fruit	Juniper
<i>Lavandula angustifolia</i>	Flower	Lavender
<i>Linum usitatissimum</i>	Seed	Linseed
<i>Lycium barbarum</i>	Fruit	Goji
<i>Malva sylvestris</i>	Flower/leaves	Mallow
<i>Marrubium vulgare</i>	Aerial part	White horehound
<i>Medicago sativa</i>	Leaves	Alfalfa
<i>Melilotus officinalis</i>	Aerial part	Yellow sweet clover
<i>Melissa officinalis</i>	Leaves	Lemon balm
<i>Mel</i>		Honey
<i>Mentha piperita</i>	Leaves	Peppermint
<i>Mentha viridis</i>	Leaves	Spearmint
<i>Musa sapientum</i>	Fruit	Banana
<i>Myrtus communis</i>	Leaves	Myrtle
<i>Ocimum basilicum</i>	Leaves	Basil
<i>Olea europea</i>	Leaves	Olive
<i>Olea europea</i>	Fruit	Olive
<i>Origanum vulgare</i>	Flower	Origan
<i>Oryza sativa</i>	Grain	Black rice
<i>Oryza sativa</i>	Grain	Rice
<i>Panax Ginseng</i>	Root	Ginseng
<i>Passiflora incarnata</i>	Aerial part	Purple passionflower
<i>Petroselinum crispum</i>	Leaves	Parsley
<i>Phoenix dactylifera</i>	Fruit	Date palm
<i>Pimpinella anisum</i>	Seed	Anise seed
<i>Piper nigrum</i>	Seed	Black pepper

Botanical name	Part of the plant	Common name
<i>Plantago Major</i>	Leaves	Broadleaf plantain
<i>Plantago Psyllium</i>	Seed	Psyllium
<i>Prunus amygdalus dulcis</i>	Fruit	Almond
<i>Prunus armeniaca</i>	Fruit	Apricot
<i>Prunus avium</i>	Fruit	Wild cherry
<i>Prunus domestica</i>	Fruit	Plum
<i>Prunus persica</i>	Fruit	Peach fruit
<i>Prunus spinosa</i>	Fruit	Blackthorn
<i>Punica granatum</i>	Fruit	Pomegranate
<i>Pyrus communis</i>	Fruit	Pear
<i>Pyrus malus</i>	Fruit	Apple
<i>Quercus robur</i>	Bark	Oak tree
<i>Ribes nigrum</i>	Fruit	Black currant
<i>Ribes nigrum</i>	Leaves	Black currant
<i>Rosa canina</i>	Hip without seeds	Dog rose
<i>Rosa damascena</i>	Flower	Damask rose
<i>Rosmarinus officinalis</i>	Leaves	Rosemary
<i>Rubus idaeus</i>	Leaves	Raspberry
<i>Rubus ulmifolius</i>	Fruit	Blackberry fruit
<i>Rumex crispus</i>	Root	Curly dock
<i>Ruscus aculeatus</i>	Root	Butcher's broom
<i>Salix alba</i>	Bark	White willow
<i>Salvia officinalis</i>	Leaves	Sage
<i>Sambucus nigra</i>	Fruit	Black elder
<i>Sambucus nigra</i>	Flower	Black elder
<i>Sasa Kurilensis</i>	Leaves/Stem	Bamboo
<i>Schinus molle</i>	Seed	Pink peppercorns
<i>Sesamum indicum</i>	Seed	Sesame
<i>Spinacia oleracea</i>	Leaf	Spinach
<i>Taraxacum officinale</i>	Root	Common dandelion
<i>Taraxacum officinale</i>	Leaves	Common dandelion
<i>Thymus serpyllum</i>	Aerial part	Breckland thyme
<i>Thymus vulgaris</i>	Leaves	Thyme
<i>Tilia tomentosa</i>	Flowers with bract	Silver linden
<i>Urtica dioica</i>	Leaves	Nettle
<i>Urtica dioica</i>	Root	Nettle
<i>Vaccinium myrtillus</i>	Leaves	Bilberry leaves
<i>Vaccinium myrtillus</i>	Fruit	Bilberry fruit
<i>Verbena officinalis</i>	Aerial part	Common vervain
<i>Viola tricolor</i>	Aerial part	Pansy flower
<i>Viscum album</i>	Leaves and sprigs	Mistletoe
<i>Vitis vinifera</i>	Leaves	Grape
<i>Vitis vinifera</i>	Fruit	Red grape

#### BIOEXTRACT 100

White grape

Apple

## BIODYNAMIC PLANT EXTRACTS



Among “sustainable use” trends, cosmetics is surely one of the main players. Our company has always adopted this philosophy: reusing agricultural by-products, not using chemical solvents, using packaging with a low content of plastic, selecting wherever possible plants grown according to sustainable agriculture practices. This last concept is best expressed by the term Biodynamic Agriculture.

The term “Biodynamic Agriculture” refers to a cultivation method based on the ideas of the philosopher Rudolf Steiner regarding sustainable systems for agricultural production as a whole with respect to the ecosystem of the land. Biodynamics represents an interpretation of agricultural production centred on the sustainability of the land within the framework of a more general balance of the natural world.

The objectives of biodynamics are to keep the soil fertile, keep the plants healthy, increase the quality of the products and use completely natural manure and

compost, excluding all artificially produced substances. Biodynamic Agriculture considers the land and man as integral parts of the universe, sensitive to its rules and influences. And a biodynamic farm ideally aims to become a self-sufficient biological unit, where land, vegetation, animals and man are in perfect equilibrium, each contributing to the sustainability of the other. Biodynamic Agriculture ensures maximizing the quality of plants and their content of beneficial active ingredients.

We selected the best Biodynamic plants to produce the extract lines for cosmetics:

**ACTIVE WATER EXTRACT BD:** water-based biodynamic plant extracts

**ACTIVE LIPO EXTRACT BD:** biodynamic plant extracts with sunflower oil

**PRESERVATIVE FREE EXTRACT BD:** hydroglycerine-based biodynamic plant extracts, containing no preservatives



## LIST OF BIODYNAMIC PLANTS AVAILABLE FOR:

Active Water Extracts BD | Active Lipo Extracts BD | Preservative Free Extracts BD

Botanical name	Part of plant	Common name
<i>Achillea millefolium</i>	Aerial part	Yarrow
<i>Aesculus hippocastanum</i>	Seed	Horse chestnut
<i>Anethum graveolens</i>	Leaf	Dill
<i>Artemisia dracunculus</i>	Leaf	Tarragon
<i>Artemisia vulgaris</i>	Aerial part	Common mugwort
<i>Avena sativa</i>	Aerial part	Oats
<i>Betula alba</i>	Leaf	Birch
<i>Carum carvi</i>	Seed	Caraway
<i>Chamomilla recutita</i>	Flower	Chamomile
<i>Coriandrum sativum</i>	Fruit	Coriander
<i>Cornus mas</i>	Fruit	Cornelian cherry
<i>Corylus avellana</i>	Leaf	Hazel
<i>Crataegus oxyacantha</i>	Flower, leaf	Hawthorn
<i>Echinacea pallida</i>	Root	Pale purple coneflower
<i>Eschscholtzia californica</i>	Weed	Eschscholtzia
<i>Galega officinalis</i>	Aerial part	Galega
<i>Glycyrrhiza glabra</i>	Root	Licorice
<i>Hedera elix</i>	Leaf	Ivy
<i>Helianthus annuus</i>	Flower	Sunflower
<i>Helichrysum italicum</i>	Flower	Helichrysum
<i>Hibiscus sabdariffa</i>	Flower	Roselle
<i>Hieracium pilosella</i>	Aerial part	Mouse ear hawkweed
<i>Hypericum perforatum</i>	Aerial part	Common st. John's wort
<i>Hyssopus officinalis</i>	Flower, leaf	Hyssop
<i>Iris pallida</i>	Rhizomes debarked	Dalmatian iris
<i>Juglans regia</i>	Leaf	Walnut
<i>Juniperus communis</i>	Fruit	Juniper
<i>Lavandula angustifolia</i>	Flower	Lavender
<i>Leonorus cardiaca</i>	Aerial part	Motherwort
<i>Levisticum officinalis</i>	Leaf	Lovage
<i>Malva sylvestris</i>	Flower, leaf	Mallow
<i>Marrubium vulgare</i>	Aerial part	White horehound
<i>Medicago sativa</i>	Leaf	Alfalfa
<i>Melilotus officinalis</i>	Aerial part	Yellow sweet dover

Botanical name	Part of plant	Common name
<i>Melissa officinalis</i>	Leaf	Lemon balm
<i>Mentha piperita</i>	Leaf	Peppermint
<i>Mentha viridis</i>	Leaf	Spearmint
<i>Ocimum basilicum</i>	Leaf	Basil
<i>Origanum majorana</i>	Leaf	Marjoram
<i>Origanum vulgare</i>	Flower	Origan
<i>Pimpinella anisum</i>	Seed	Anise seed
<i>Prunus spinosa</i>	Fruit	Blackthorn
<i>Pyrus malus</i>	Fruit	Apple
<i>Quercus robur</i>	Bark	Oak tree
<i>Ribes nigrum</i>	Leaf	Black currant
<i>Ribes nigrum</i>	Fruit	Black currant
<i>Rosa canina</i>	Hip without seeds	Dog rose
<i>Rosa damascena</i>	Flower	Damask rose
<i>Rubus fruticosus</i>	Leaf	Blackberry
<i>Rumex crispus</i>	Root	Curly dock
<i>Ruta graveolens</i>	Leaf	Rue
<i>Salix alba</i>	Bark	White willow
<i>Salvia officinalis</i>	Leaf	Sage
<i>Salvia sclarea</i>	Leaf	Clary sage
<i>Satureja montana</i>	Leaf	Winter savory
<i>Silybum marianum</i>	Leaf	Cardus marianus
<i>Silybum marianum</i>	Seed	Cardus marianus
<i>Solidago virgaurea</i>	Aerial part	European goldenrod
<i>Tanacetum vulgare</i>	Aerial part	Tansy
<i>Taraxacum officinale</i>	Leaf	Common dandelion
<i>Taraxacum officinale</i>	Root	Common dandelion
<i>Thymus serpyllum</i>	Aerial part	Breckland thyme
<i>Thymus vulgaris</i>	Leaf	Thyme
<i>Trigonella foenum-graecum</i>	Seed	Fenugreek
<i>Urtica dioica</i>	Leaf	Nettle
<i>Urtica dioica</i>	Root	Nettle
<i>Viola tricolor</i>	Aerial part	Pansy flower

## ACTIVE JUICES

ACTIVE JUICES is an innovative line of ingredients for cosmetics based on freshly centrifuged fruits and vegetables following the latest healthy foods and diet trends.

ACTIVE JUICES are produced on-demand with fresh fruits and vegetables to maximize the contents in active molecules and nutrients.

No chemical solvent is used in any step of production of our ACTIVE JUICES, making the products completely safe and environmentally friendly.

We can produce fresh centrifuged products and bespoke mixes according to our customers' requests.

All the products in this line can be used in organic certified cosmetic formulations.

**Typical INCI name:** [name of the plant] juice, citric acid, sodium benzoate, potassium sorbate.

### LIST OF FRESH PLANTS AVAILABLE FOR:

#### Active Juices line

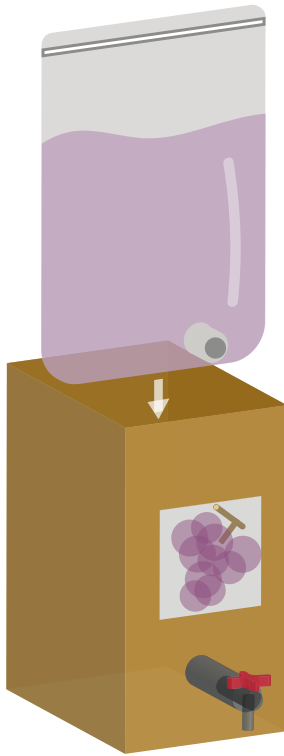
Botanical name	Part of the plant	Common name
<i>Actinidia chinensis</i>	Fruit	Kiwi
<i>Ananas sativus</i>	Fruit	Pineapple
<i>Beta vulgaris</i>	Root	Beetroot
<i>Brassica oleracea</i>	Plant	Broccoli
<i>Capsicum annuum</i>	Fruit	Pepper
<i>Citrus aurantifolia</i>	Fruit	Lime
<i>Citrus aurantium dulcis</i>	Fruit	Orange
<i>Citrus lemon</i>	Fruit	Lemon
<i>Citrus nobilis</i>	Fruit	Mandarin orange
<i>Cucumis sativus</i>	Fruit	Cucumber
<i>Daucus carota sativa</i>	Root	Carrot
<i>Fragaria ananassa</i>	Fruit	Strawberry
<i>Lactuca Scariola sativa</i>	Leaf	Lettuce
<i>Mangifera indica</i>	Fruit	Mango
<i>Musa paradisiaca</i>	Fruit	Banana

Botanical name	Part of the plant	Common name
<i>Passiflora edulis</i>	Fruit	Passion fruit
<i>Prunus armeniaca</i>	Fruit	Apricot
<i>Prunus avium</i>	Fruit	Italian Cherry
<i>Prunus persica</i>	Fruit	Peach
<i>Punica granatum</i>	Fruit	Pomegranate
<i>Pyrus communis</i>	Fruit	Pear
<i>Pyrus malus</i>	Fruit	Apple
<i>Rubus fruticosus</i>	Fruit	Blackberry
<i>Rubus idaeus</i>	Fruit	Raspberry
<i>Solanum Lycopersicum</i>	Fruit	Tomato
<i>Solanum tuberosum</i>	Fruit	Potato
<i>Spinacia oleracea</i>	Leaf	Spinach
<i>Vitis vinifera</i>	Fruit	Grape
<i>Zingiber officinale</i>	Root	Ginger

#### SOME MIX ALREADY AVAILABLE:

Botanical name	Part of the plant	Common name
<i>Actinidia chinensis</i> , <i>Pyrus malus</i>	Kiwi fruit, apple fruit	Kiwi-Green Apple
<i>Citrus aurantium dulcis</i> , <i>Citrus lemon</i> , <i>Zingiber officinale</i>	Orange fruit, lemon fruit, ginger root	DETOX
<i>Citrus aurantium dulcis</i> , <i>Daucus carota sativa</i> , <i>Citrus lemon</i>	Orange fruit, carrot root, lemon fruit	A.C.E.

Botanical name	Part of the plant	Common name
<i>Daucus carota sativa</i> , <i>Carica papaya</i>	Carrot root, Papaya fruit	Carrot and Papaya
<i>Pyrus malus</i> , <i>Citrus aurantifolia</i> , <i>Actinidia chinensis</i>	Apple fruit, Lime fruit, kiwi fruit	Apple, Lime, Kiwi
<i>Rubus fruticosus</i> , <i>Vaccinium Angustifolium</i> , <i>Rubus idaeus</i>	Blackberry fruit, Blueberry fruit, Raspberry fruit	Red fruits



**- 85%**  
consumption of plastic  
material from  
non-renewable sources

**72,5%**  
from recycled material

## Functional & eco-friendly packaging

Since 2007 Phenbiox has been packaging its plant extracts in Bag-in-Box rather than the jerrycan. This functional packaging is widely used in the food sector.

The bag-in-box consists of an inner polyethylene bag containing the liquid product, inserted in an outer recyclable corrugated cardboard box. The polyethylene bag is fitted with a tap which makes it possible to very accurately measure out the required amount of product. As the product is extracted, the volume of the bag decreases without any air getting in. This prevents the creation of a headspace, reducing oxidative phenomena and thus the possible loss of product functionality. This system also prevents any microbial contamination of the remaining product.

It is possible to calculate the quantity of plastic (obtained from non-renewable oil-based materials) used per kg of extract packed in bag-in-boxes or in conventional jerrycans:

bag-in-box = 0.06 kg / 10 kg = 6 grams of plastic / kg of extract

Jerrycan = 1 kg / 25 kg = 40 grams of plastic / kg of extract.

Using Bag-in-box packaging we can reduce the consumption of plastic material from non-renewable sources by 85% compared to the classic HDPE packaging.

The bag-in-box system used by Phenbiox is produced with 72.5% recycled material helping to conserve natural resources, cut energy consumption and reduce waste sent to landfills and incinerators.



# OUR ACTIVES FROM UPCYCLING

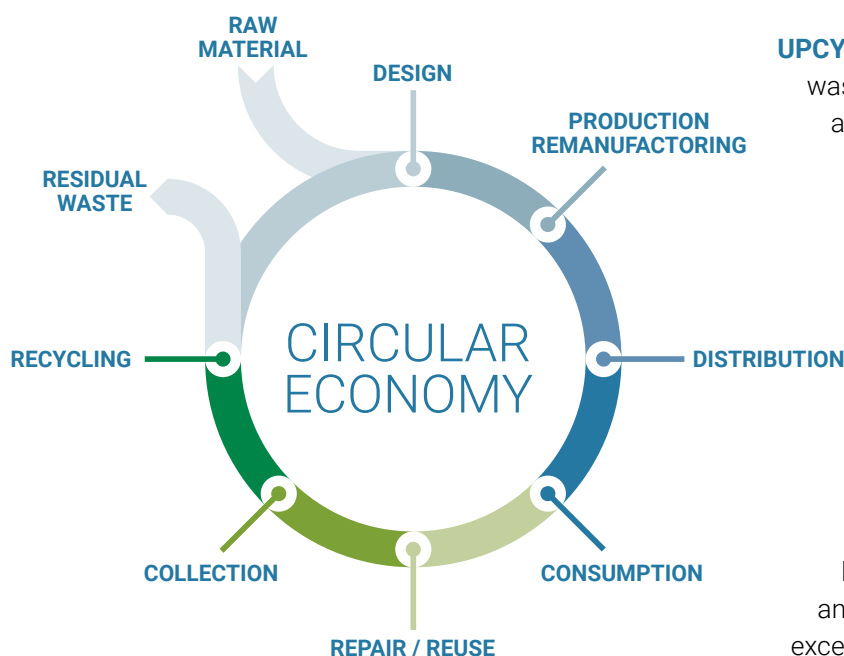
Upcycling is one of the elements of a much wider topic: THE CIRCULAR ECONOMY, a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended reducing wastes as much as possible.

Life Cycle Assessment (LCA) studies the impacts of a product during its existence. The life cycle of a product includes the extraction of the raw materials, manufacturing, packaging, transport, distribution, use and possible reuse, collection, storage, recovery and final disposal of the waste resulting from its use. The goal is to extend the life cycle of materials by reusing them for other purposes before disposal.

Circular economy is not a new concept. Before industrialization, food production was considered to be circular due to its own nature. The traditional farmers' culture did not tolerate waste, respecting all raw materials, of animal or vegetable origin. Home economics was about subsistence and not about abundance. Everything was considered usable: "Waste not want not" In 19<sup>th</sup> and 20<sup>th</sup> Century this circular approach was superseded by the linear economic model, which is based on a take-make-consume-throw away pattern. This model relies on large quantities of cheap, easily accessible materials and energy.

Today the circular economy is being re-evaluated in a modern context where the sustainability of resources and processes is again a key point for a fairer development of the society and the protection of the environment.

One of the most relevant factors of this circular approach is to prevent (precycling) or reduce as much as possible waste productions applying different strategies:



## UPCYCLING

waste transformation into something of higher quality and value

## RECYCLING

waste transformation into something of similar value compared to the starting material (plastic, glass, aluminium recycling)

## DOWNCYCLING

waste transformation into something that has less value than the product from which it derives (biogas production)

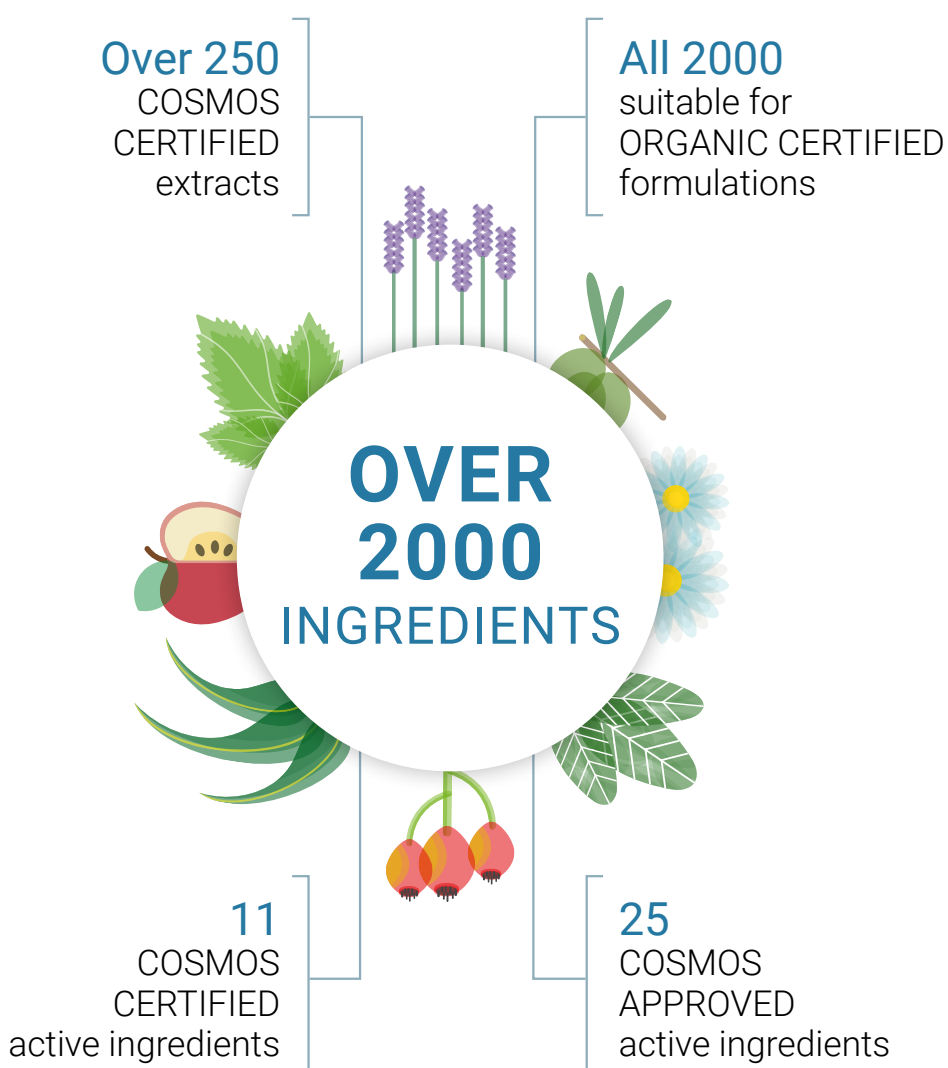
Phenbiox offers several active ingredients derived by UPCYCLING processes of different co-products and by-products of Italian food productions of excellence.

Through the up cycling of by-products from excellent Italian agri-food productions, Phenbiox has developed 11 active ingredients for cosmetics highlighted by the logo



# Certifications

## ORGANIC CERTIFICATIONS



**COSMOS  
APPROVED**



**COSMOS  
CERTIFIED**

Phenbiox is a COSMOS CERTIFIED company since 2011.

Whenever the organic certified plant is available we can easily go through the certification process to expand our line fulfilling the customer's demand of new ingredients.

All our ingredients are produced with environmental friendly and solvent-free processes and can therefore easily be used in natural and organic formulations.

We can also quickly provide all the documents needed to let our customers use our products even if committed with different standards and rules such as ISO 16128.



## ENVIROMENTAL, SOCIAL, AND GOVERNANCE CERTIFICATION

Phenbiox has proudly obtained the ECOVADIS certification, reaffirming our commitment to sustainability and ethical business practices. This recognition highlights our dedication to responsible sourcing, environmental impact reduction, and social responsibility, ensuring high-quality, eco-conscious solutions for our customers.

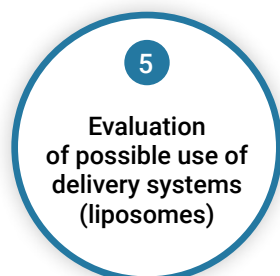
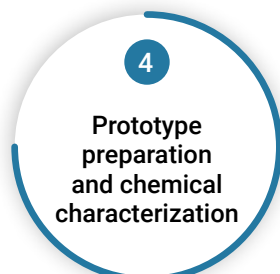


## HALAL CERTIFICATION

Phenbiox has obtained Halal certification from the World Halal Authority, ensuring that our products meet the highest standards of quality and compliance with Halal requirements. This certification reflects our commitment to inclusivity and excellence, allowing us to offer safe, ethically produced solutions to a wider global market.

# Exclusive customizations

## EXAMPLE OF THE CREATIVE PROCESS TO DEVELOP AN EXCLUSIVE CUSTOMIZED INGREDIENT



The best way to stand out from the crowd is to be different from anyone else and the best way to be different is to have something unique.

Just like haute couture, the cosmetics sector needs personalized and high-quality raw materials, and Phenbiox is the right partner to work with in devising and producing new ingredients. Our in-house experts can work with your technical and marketing staff throughout the creative and technical processes in order to supply truly customized ingredients.

From a simple extract of an unusual plant to a high-tech, characterized, substantiated and even patented ingredient, we are willing to support you in the process of creating your own cosmetic ingredient to characterize your unique next cosmetic line.

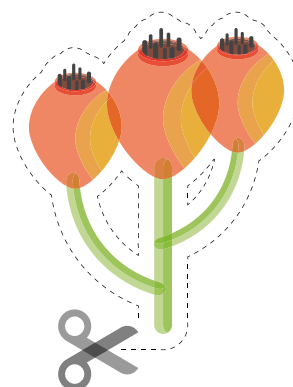
☒ Literature review on peer-reviewed journals on selected plant

☒ Technical and safety data sheet issuing

☒ Support during substantiation tests

☒ Support during patent application process

☒ Supply of the customized ingredient







[illegible]

SKIN

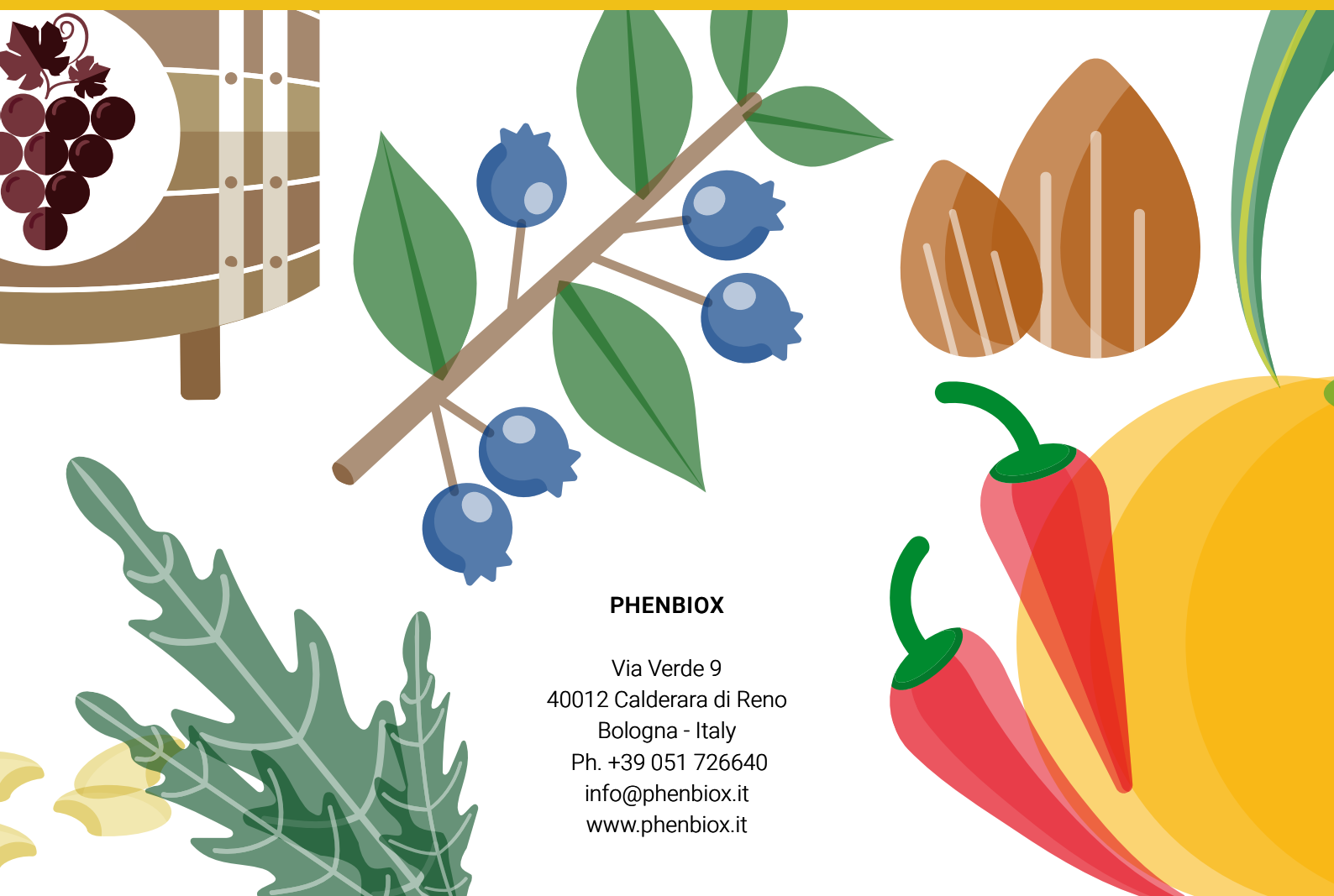
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	3HC	ADIPO-TRAP	ALOFORM HF	AQ-SAVE	AVENOFERM HF	BODYFERM HF	CANNABIOT	CAPERACTIVE	COUPERINE	CRUOX®	FERMENTHAIR HF	FERMENTED RICE WATER	G-CELL	GSH-DEFENSE	HYDROPOM®	HYDROPUNTIL	LENTIMYRT HF	LIFE ESSENCE-VITIS	LUMINESCINE	MANNAFERM HF	OLEOFACE	OLEOPHEN	OLEOSOFT-40	OLEOX®	P-CELL	PRO-STRUCTURE	PUMPCOLL	PURE-PHEN	REGENINE	SOY-CELL	UVIOX®	VEGEKER-PLUS CF	VITISBALM	W TR-ACTIVE	
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Anti-Blue Light																			•																
Anti-Cellulite/Reshaping		•				•														•															
Anti-Couperose									•																										
Anti-Eya Bags / Dark Clrcles																					•												•	•	
Anti-Pollution															•																				
Anti-Stretch Marks																							•												
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Microbiota Modulation					•		•										•	•										•							
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Peeling/Skin Renewal																													•						
Personal hygiene			•																																
Radiance								•											•																
Reduce Lines/Wrinkles							•			•										•	•							•			•			•	•
Skin Barrier Function																	•			•		•	•												
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UV Stress Protection															•				•											•					
Whitening																			•																
Wound healing			•																																

HAIR

Anti-Dandruff																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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designpeople



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