



*Our story*

*Pioneering technology*

*Active ingredients*

A close-up photograph of a leaf's vein structure, showing a complex network of veins in shades of green and blue. The background is blurred, suggesting a natural setting.

## Natural ingredients catalogue



## VYTRUS BIOTECH: THE ORIGINS

This is a real story of passion for plants, science, personal care, and people.

The story begins when two scientific and entrepreneurial souls, Albert Jané and Òscar Expósito, crossed their paths at the Faculty of Pharmacy of the University of Barcelona.


At that point, Vytrus Biotech started as a spin-off company of the Faculty in 2009.

Today, the firm located in Terrassa (Barcelona) has turned into an industrial reference in the cosmetic market.

Its highly innovative plant stem cell-derived Personal Care ingredients are distributed worldwide.




## OUR DNA



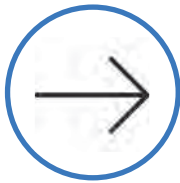
We develop, produce and commercialize high added value cosmetic active ingredients at industrial scale, based on plant stem cell biotechnology.

## LEADING FOR A COMMITMENT



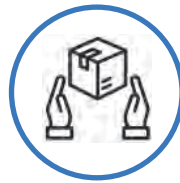
Becoming a world reference in the plant biotechnology field applied to personal care while making a positive impact on nature.

## KEY NUMBERS OF THE FIRM...



**+10**

years of  
experience



**13**

cosmetic  
ingredients



**7**

patent  
applications



**9**

international &  
national awards



**+50**

countries  
distribution



**+70%**

of production  
sold worldwide



**Certified**

company

★ EFfCI GMP

★ ECOVADIS

★ COSMOS

★ ISO 9001:2015



## OUR INSPIRATION, THE PLANTS

Vytrus Biotech uses the large biochemical potential of plants and the massive work carried out by them during millions of years of evolution to obtain new bioactive molecules.

Using the **plant stem cell** as a cellular factory, we produce the plant actives of interest. Through our technology, we culture plant cells and drive their metabolism towards the production of the valued **bioactive substances used in the cosmetics sector**.

### MIMICKING PLANT STRATEGIES

Our actives are thought from nature. We first observe natural plant processes and strategies, mimic their behaviour and develop our personal care ingredients.

## PLANT CELL BIOFACTORIES

Plants have a constant pool of **Totipotent cells (Plant Stem Cells)**. These cells can repair any damaged tissue, and a complete and functional plant can be regenerated from a single totipotent cell maintained under the appropriate conditions. They are an excellent and innovative source of active compounds for skin and hair care.

### Exceptional regeneration potential of Totipotent cells: the base of Vytrus actives

Through a designed process of cellular reprogramming (**de-differentiation**), **Plant Stem Cells** can be obtained from accurately selected plant tissues (explants).

Plant Stem Cells cultures require very advanced technology to be grown and it must be performed entirely under sterile conditions.

Both callus and liquid cell cultures are maintained under strict and controlled conditions, in order to achieve the totipotent plant cell line establishment. This ensures an endless source of high-quality plant material.



## TRADITIONAL CELL CULTURE



1

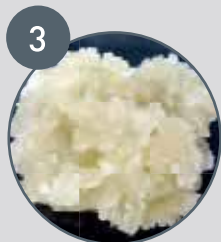
The plant is cultured in vitro. Optimization of the agar culture medium is required for each plant.



2

By biochemical signaling, totipotent cells are mobilized through a wound healing process.

Signaling is optimized to avoid cicatrization and therefore, they grow but don't differentiate.



3

Once a sufficient cell density is achieved, totipotent cells are cultured in a selective growth medium to obtain the callus.

Optimization of the agar culture medium is required for each plant.



4

Once the callus is established, totipotent cells are cultured in a liquid growth medium.

Optimization of liquid culture medium is also required for each plant.

## OUR TECHNOLOGY PLATFORMS



### PLASMA RICH IN CELL FACTORS

Metabolome



### PHYTO-PEPTIDIC FRACTIONS

Secretome



### PHYTO-LIPIDIC FRACTIONS

Lipidome



### PHYTO-GLUCIDIC FRACTIONS

Glycome

The cell culture is the base of our current ingredients.

The next steps to obtain the actives vary, depending on the category and type of desired active ingredient.

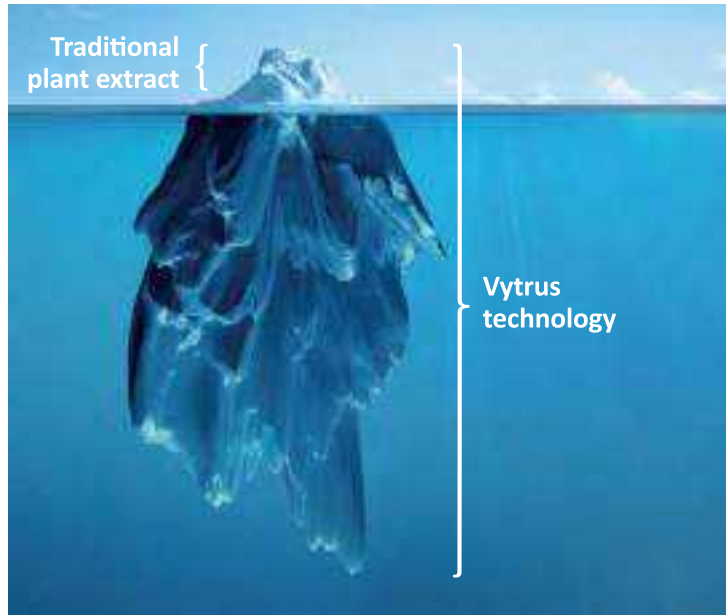
# THE ART OF MOLECULAR SYNERGY: THE REAL POWER OF PLANTS

Plants have developed **sophisticated cocktails of molecules** (phytochemicals) to ensure their survival and spread.

Being rooted, plants cannot fight or run away from dangers like animals do.

Due to this limiting situation, they have evolved and developed a **unique mechanism** to defend themselves from diverse threats (animals, climatic adversities, microorganisms).

The **Molecular Synergy** is based on a simple statement: plant stem cells contain and produce large quantities of secondary metabolites and essential substances that perform in a synergistic way to produce more effective dermocosmetic active.



Why not take advantage of this natural and wise way of functioning?

Vytrus Biotech has discovered how to benefit from this astonishing potential.

## HIGHLY SUSTAINABLE TECHNOLOGY



WATER

**99.98% saving**

Up to 10,000 l of water saving for each kg of ingredient, compared to traditional methods.



ARABLE SOIL

**99% saving**

Up to 99% less arable soil to produce up to 1,000 kg of ingredient in 100m<sup>2</sup>, compared to traditional methods.



CARBON FOOTPRINT

**Low carbon footprint**

Saving a lot of energy, fuel, avoiding transportation due to cultivate inside the lab and avoid planting full crops.



Plant origin



Environmentally friendly



Free from pesticides, herbicides, heavy metals, VOC and BSE



Contains no GMO, no classified CMR and no listed allergens



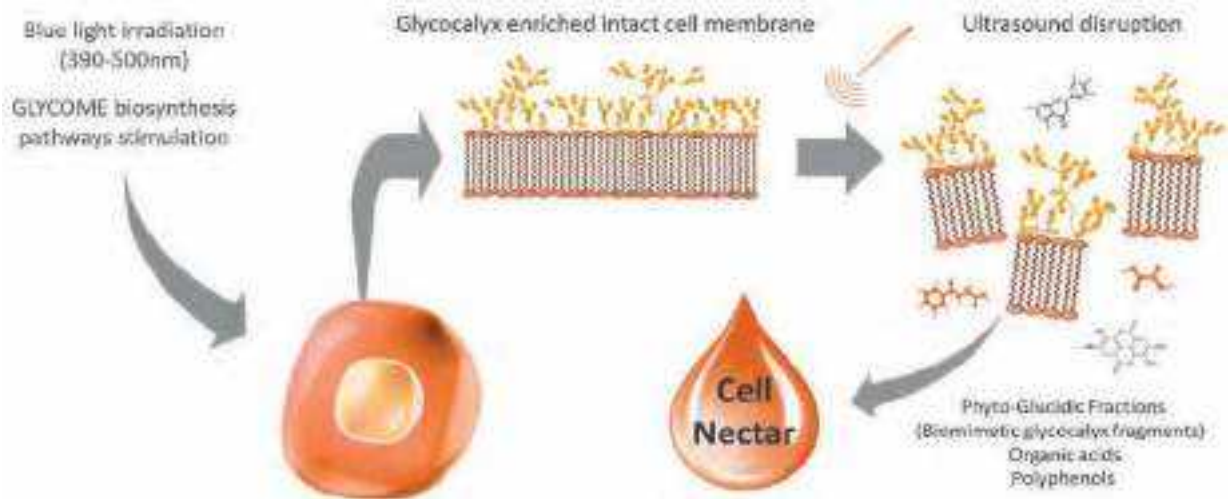
# OUR INGREDIENT CATALOGUE

1

## PHYTO-GLUCIDIC FRACTIONS

The **Phyto-Glucidic Fractions (PGF)** are our technological platform inspired by the **sweetening potential** of plants that use sugars to perform multiple essential functions of the cell (signaling, energizing, activity catalysts, etc.).

The company has developed an innovative cell membrane disruption process to release a full range of **glycoconjugates** present in the glycocalyx of plant stem cells and make them bioavailable to the skin. These glycoconjugates are released while **preserving their structural integrity** to ensure their bioactivity.



What personal care ingredients from our portfolio have been developed based on the Phyto-Glucidic Fractions technology?



**NECTARIA LITHOPS™**

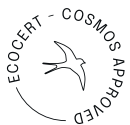
The Cell Nectar for a D-Skin



# NECTARIA LITHOPS™

## The Cell Nectar for a D-Skin

- A D-Skin, a new cosmetic concept
- Volumize, plump, glow, and revitalize
- New approach for Sun Care
- Oxygenation & microcirculation booster



### D-Skin: a deeply hydrated skin that shines from the inside out

Did you know that your skin needs the light to produce **vitamin D, the Sun vitamin**?

What if we helped the skin to **optimize Vitamin D synthesis** from Cosmetics to be healthy?

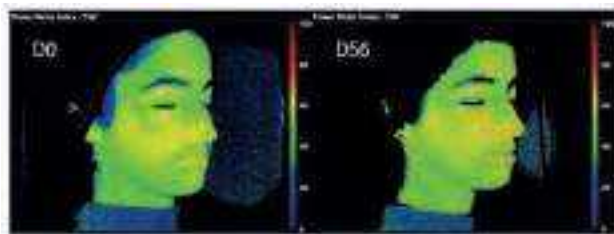
#### THE INGREDIENT

The active **NECTARIA LITHOPS™** stimulates the synthesis of vitamin D topically to strengthen, revitalize, volumize, and glow the faded skin to achieve a D-Skin by:

- 1 Strong spatial organization of cell membranes.
- 2 Maximizing light use.
- 3 Boosting deep water reserves.
- 4 Optimizing vitamin D activation.

#### IN VIVO EFFICACY

- 1 Deep skin hydration increase by 123%:



- 2 Cheek volume booster:



#### SKIN MICROENVIRONMENT OPTIMIZATION

Inefficient microenvironment



Optimized microenvironment



An ingredient made from **Lithops stem cells**.

#### INCI

Fructooligosaccharides, Bioflavonoids, Glycoproteins. Preservative free.

#### APPLICATIONS

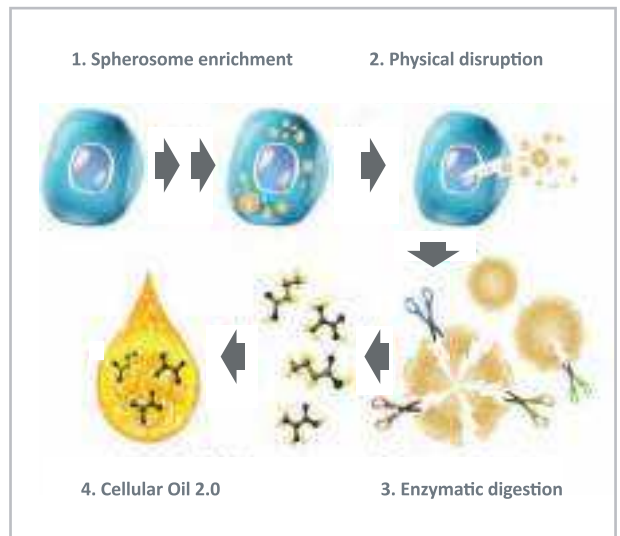
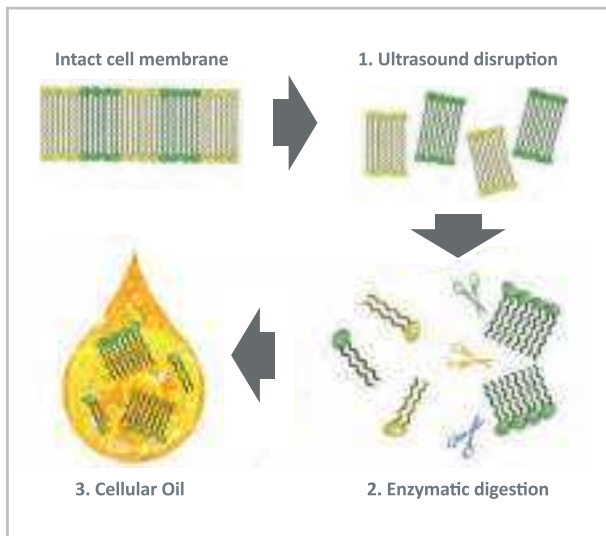
Deep skin hydration formulations, skin dewiness products (volumizing, brightening), Sun care D-enriched formulations, Well-ageing and dermal filling treatments.

#### DOSAGE

Suggested use level of the active in formulations: 1 - 3%.

PLF represents the first generation of biomimetic plant cell lipids: the Phyto-Lipidic Fractions (PLFs). Through a driven cell membranes disruption process, it has been possible to identify, produce and release these unique lipid fractions from the inside of plant stem cell, being the first examples the so-called lipid RAFTs and SCFA (Short Chain Fatty Acids).

For the first time, thanks to PLF technology it is possible to modify the composition of the cell lipidome to target different biological functions and make specific cell lipids bioavailable for the skin with a very innovative raw material source: the cellular oil.



What personal care ingredients from our portfolio have been developed based on the Phyto-Lipidic Fractions technology?



**ELAYA RENOVA™**

The Hair Tensegrist



**KANNABIA SENSE™**

The Microbiota Whisperer



**OLEA VITAE™**

The first Cellular Oil



# ELAYA RENOVA™

## The Hair Tensegrist

- Hair protection, restructuring & reinforcing
- Scalp regeneration, protection & hydration
- Hair anchoring booster
- A global haircare skinification
- Hair & scalp beautifying



### Unique haircare skinification approach to improve hair & scalp Tensegrity

Did you know that our hair, scalp and hair follicle are all interconnected?

What if the whole hair system could be revitalized with a plant strategy inspired by architecture?

#### THE INGREDIENT

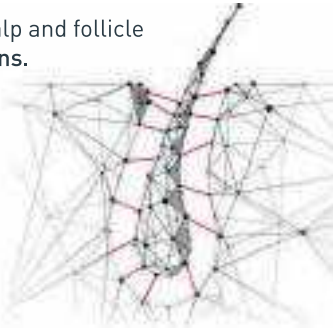
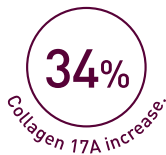
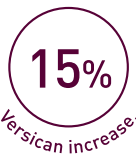
The active **ELAYA RENOVA™** contains a sophisticated and nourishing proteo-lipidic matrix that maintains the tensegrity of hair and scalp by acting on their:

- 1 Protection.
- 2 Reinforcement and regeneration.
- 3 Beauty enhancement.

#### PROVEN EFFICACY

##### 2 Scalp and hair anchoring reinforcement:

Reinforcing connection between scalp and follicle by increasing hair anchoring proteins.



#### REVITALIZED HAIR AND SCALP

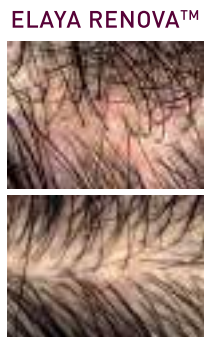
##### 1 Hair protection vs high temperatures and UV:



Protection of dyed hair color

Hair damage reduction

##### 3 Scalp and hair beautifying:



Collagen boosting

Scalp regenerating

An ingredient made from wild olive tree stem cells.

#### INCI

Olea Europaea (Olive) Leaf Extract, Cyclodextrin. Preservative free.

#### DOSAGE

Suggested use level of the active in formulations: 0.5 - 2%.

#### APPLICATIONS

Volumizing, vitalizing and hydrating hair & scalp formulations; hair anchoring & color protection treatments; soothing, rebalancing & anti desquamation scalp formulations; sun protection formulations for hair care.



# KANNABIA SENSE™

## The Microbiota Whisperer

- Microbiota-Skin-Brain axis ignition
- First Instant Mood Lifter
- Ageing-friendly active ingredient
- Positive brain activation
- Stimulating positive emotions



If you FEEL good, you LOOK better!

Did you know that your skin is able to connect with your **brain pleasure areas**?

### THE INGREDIENT

The active **KANNABIA SENSE™** is an innovative prebiotic treatment that stimulates the skin microbiota to produce a positive **IN-SITU postbiotic** cocktail. This postbiotic ignites the synthesis of cutaneous oxytocin which:

- 1 Activates the **brain pleasure areas** (oxytocin like).
- 2 Induces better **self-perception & positive emotions**.
- 3 Promotes a **healthier and prettier skin**.



New *Cannabis sativa* raw material with **no cannabinoids** inside.

THC & CBD Free

In vivo Brain analysis

What if we stimulated the **Microbiota-Skin-Brain connection**, to feel better and look prettier?

### IN VIVO EFFICACY

- 1 Skin well-ageing effect: mood wrinkles.

Frown

Marionette lines



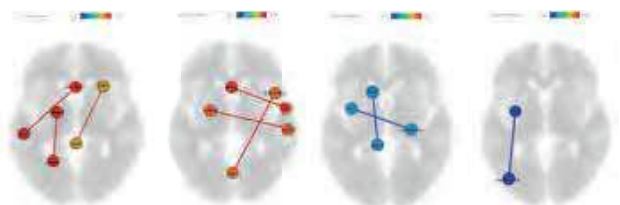
BEFORE

AFTER

- 2 Positive brain activation analysis (fMRI):

KANNABIA SENSE™

PLACEBO



0 d (10 min)

28 d

0 d (10 min)

28 d

### INCI

Cannabis Sativa Seed Oil. Preservative free.

### APPLICATIONS

Happy daily cream, radiance & glow, well-being body lotion, delicate facial treatments, restoring night cream, uplifting massage lotion.

### DOSAGE

Suggested use level of the active in formulations: 0.5 - 3%.



# OLEA VITAE™

## The first Cellular Oil

- Triggering cell revival
- Re-charging your internal cell batteries
- Powerful revitalizer of aged skin
- Mitochondrial membrane remodeling



### Fighting Energetic Ageing by the stimulation of Mitochondrial Synapses

Did you know that ageing affects our cellular energy levels, causing **Energetic Ageing**?

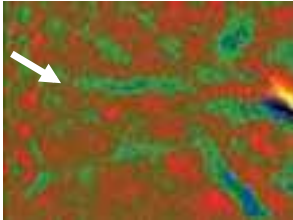
What if we could **recharge** these mature cells from the inside, so they get back to the **charging** levels of younger cells?

#### THE INGREDIENT

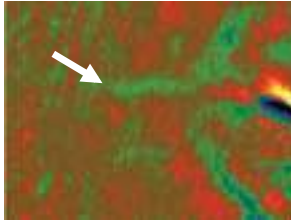
The active **OLEA VITAE™** is a powerful **cellular oil**, a revitalizer of mature skin that fights aging using a new mechanism of action:

- 1 Stimulates communication between mitochondria.
- 2 Activates the **Mitochondrial Synapses**.
- 3 Ignites the energy and vitality levels of epidermal cells.
- 4 **Anti-wrinkle, firming and repairing** effect.

#### IN VIVO EFFICACY



0 d



56 d



BEFORE



AFTER

Visual wrinkle fading and even skin texture.

#### RECHARGE YOUR INTERNAL BATTERIES



An ingredient made from **wild olive tree stem cells**.

#### INCI

Olea Europaea (Olive) Leaf Extract. Preservative free.

#### APPLICATIONS

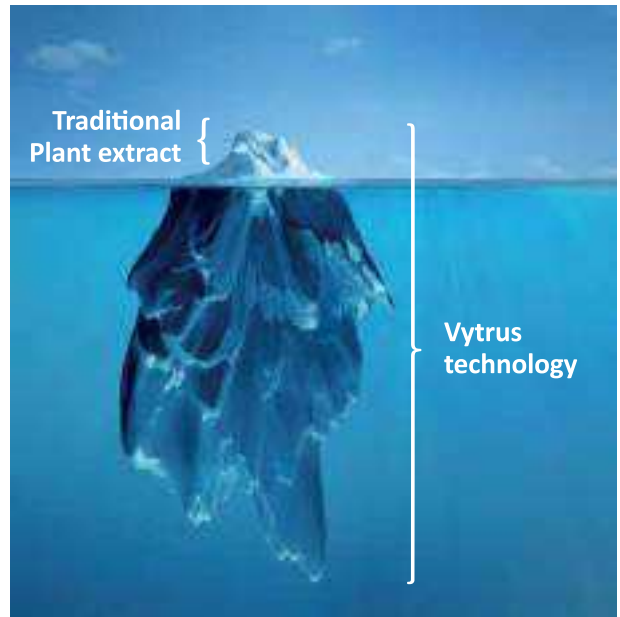
For facial, eye and lips, men (serum & aftershave), body, hair and wellbeing treatments:  
Antiaging/Rejuvenating, Firming, Anti-wrinkles/skin smoothing, Repairing, Revitalizer, Booster.

#### DOSAGE

Suggested use level: 0.5 - 2%.

PRCF represents a new range of ingredients that arises from Vytrus' Plant Cell Biofactories (PCB) Technology Platform. This technology is based in a driven development process that is designed to enrich the cell culture in several fractions of active molecules in sync (the **metabolome**), targeting the molecular synergy phenomenon.

PRCF is our innovative approach to the phenomenon and proprietary concept of **MOLECULAR SYNERGY**: the new way to take advantage of the real power of plants.



What personal care ingredients from our portfolio have been developed based on the Plasma Rich in Cell Factors technology?



### DEOBIOME NONI™

The Biological  
Deodorant



### SENSIA CAROTA

Feel good in your  
Sensitive Skin



### QUORA NONI™

The Microbiome  
Communication Hacker



### SARCOSLIM RE-SHAPE™

Sculpt your curves  
at will



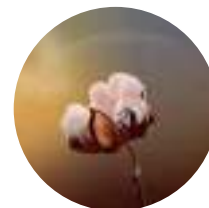
### TURMERIA ZEN™

The Emotional  
Wellbeing Manager



### LUMINIA GRANATUM™

The smart skin  
Brightener



### ARABIAN COTTON™

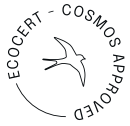
The Broad Spectrum protector  
against photo-ageing

# DEOBIOME NONI™

## The Biological Deodorant



- Global odour intensity reduction
- A new PREBIOTIC technology
- Microbiota metabolism shift
- Balancing microbiota by modulating armpit ecosystem



Improving your body odour fingerprint

### Let your skin breathe

Humanity have always masked **body odour**. Why not fighting against it, safely?

What if we could control bad odour while respecting your skin's physiology?

#### THE INGREDIENT

DEOBIOME NONI™ is a deodorant active that reduces body odour while respecting the skin microbiota. It is based on:

- 1 Biological strategy:** plant anti-Quorum Sensing molecules that prevent the formation of bacterial communication.
- 2 Prebiotic strategy:** shifting metabolism from lipids to polysaccharides, avoiding the production of malodorous molecules.

#### Prebiotic cocktail

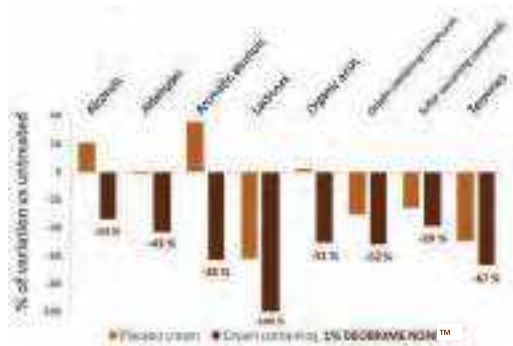


#### Quorum Sensing inhibitors

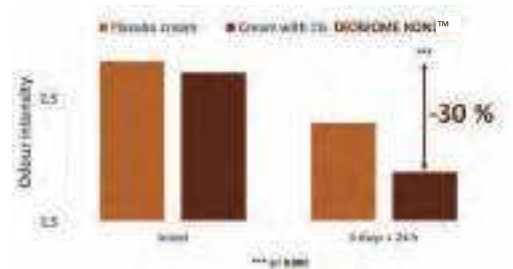


An ingredient made from *Morinda citrifolia* stem cells.

#### IN VIVO EFFICACY



> 100 compounds analyzed



Down to 82% reduction

Odour intensity reduction

#### INCI

Morinda Citrifolia Fruit Extract. Preservative free.

#### APPLICATIONS

Underarm deodorants (roll-on, sticks, creams, gels), feet and scalp treatments, and microbiota rebalancing formulations.

#### DOSAGE

Suggested use level: 0.5 - 2%.





# SENSIA CAROTA

## Feel good in your Sensitive Skin

- Strengthening the sensitive skin
- Skin redness reduction
- Targeting the silent inflammation
- Highly sensitive skin hydration effect



Excellent skin microbiota compatibility

### Rebalancing the skin well-being networks

Did you know that plants protect themselves from the **sensitizing environmental conditions**?

What if we took profit of this natural ability to **strengthen our own skin protection systems**?

#### THE INGREDIENT

SENSIA CAROTA calms and protects sensitive skin by:

- 1 Lipid replenishment.
- 2 Inhibition of Neurogenic Inflammation.
- 3 Inhibition of inflammation caused by unbalanced Microbiota.
- 4 Antioxidant activity.
- 5 Restoring epidermal cells well-being.

Sensitive skin protection

Calming effect on the skin

Skin hydration effect



An ingredient made from **Carrot stem cells**.

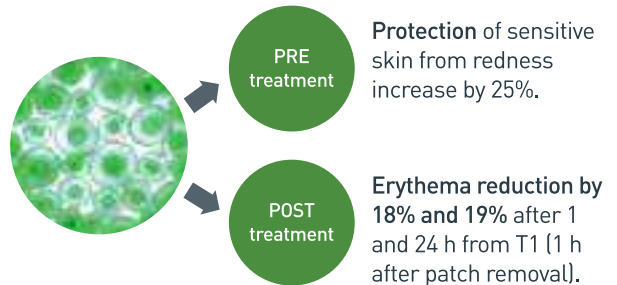
#### INCI

Daucus Carota Sativa [Carrot] Root Extract, Preservative free.

#### DOSAGE

Suggested use level: 0.5 - 2%.

#### IN VIVO EFFICACY



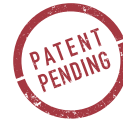
#### APPLICATIONS

Sensitive & reactive skin care formulations, delicate refreshing lotions and gels, protective & repairing formulations, skin soothing formulations, clean & natural cosmetics, skin microbiota respectful treatments.

# QUORA NONI™

## The Microbiome Communication Hacker

- Acne prone skin microbiota rebalancing
- Dynamic microbiota population control
- Active skin pore size reduction
- Guided skin sebum reduction



New  
Anti-acne  
mechanism  
of action

### Anti microbial Quorum Sensing

Did you know that microbes talk to each other through a **communication system** called **Quorum Sensing**?

What if we hacked this communication signals to **avoid the attack of skin harmful bacteria**?

#### THE INGREDIENT

QUORA NONI™ is an active made from the concentrated metabolome of totipotent cells, rich in Anti-Quorum Sensing molecules (Anti-Quormones) that:

- 1 Blocks microbiome communication signals.
- 2 Inhibits the virulent biofilm formation.
- 3 Preserves cells alive due to bacteriostatic and anti-biofilm effect.
- 4 Reduces sebum production and achieves microbiota rebalance.

Perfecting the skin surface

No use of antibiotics

Quorum Quenching approach



An ingredient made from *Morinda citrifolia* stem cells.

#### INCI

Morinda Citrifolia Fruit Extract. Preservative free.

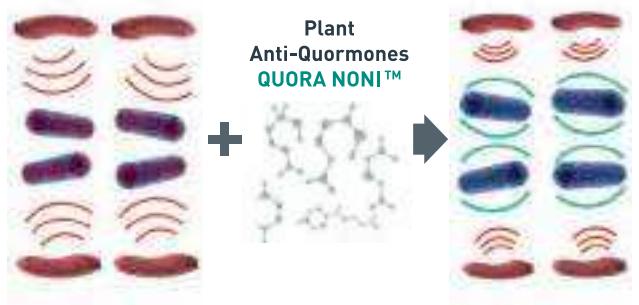
#### DOSAGE

Suggested use level: 0.5 - 2%.

#### IN VIVO EFFICACY



#### SHOOT THE MESSAGE, NOT THE MESSENGER



#### APPLICATIONS

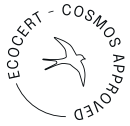
Microbiome protection & balance. Treatment & prevention of oily, acne prone skin. Regulation of sebum & skin imperfections. Prevention of the epidermal barrier disruption, protection & homeostasis of skin.



# SARCOSLIM RE-SHAPE™

## Sculpt your Curves at will

- Smart and Targeted Slimming
- Skin regeneration and repair
- Global Lipolytic Effect
- Diet Synergistic Effect



### Harnessing the extra energy to rebuild your skin

Did you know that plants can burn fat at will, thanks to **unique fat burning signals?**

What if we did the same and **burnt our fat** when and from where we want?

#### THE INGREDIENT

SARCOSLIM RE-SHAPE™ sculpt your curves at will while improving your skin structure. It introduces the concept of **Liposculpture**, a skin remodeling system that:

- 1 Helps reduce your fat.
- 2 Uses intercellular energy released on fat burning to **tighten and reaffirm tissue.**



An ingredient made from *Sarcocapnos crassifolia* stem cells.



Metabolic activation (1)



Skin rebuilding (2)



#### IN VIVO EFFICACY



RE-SHAPING EFFECT: The reduction of volume of ptosis (ml) is indicated in the blue zone, showing a more defined facial contour line

Smart slimming

Up to -5.6cm thigh perimeter reduction

Up to -3.75 kg equivalent diet

#### INCI

Bioflavonoids, Fumaric Acid, Preservative free.

#### APPLICATIONS

Rebel volume reducer, anti-cellulite & double chin treatments, anti-eye bags, lack of tone, contour remodeling, smoothing of orange skin, firming, treatments for sagging and for specific needs of neck, décolletage and breasts.

#### DOSAGE

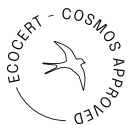
Suggested use level: 1.5 - 3%.



# TURMERIA ZEN™

## The Emotional Wellbeing Manager

- The Anti-stress wrinkles
- Emotional hydration Manager
- Modulator of Brain-skin connection



Welcome to  
Cosmetics of  
Emotions

### Make your skin speak for you

Did you know that stress has a direct effect on your skin?

Plants have anti-stress molecules to improve our skin well-being.

#### THE INGREDIENT

TURMERIA ZEN™ is a multi-active rich in stress-related cell factors specially designed to act synergistically against brain-skin connection induced stress:

- 1 Neutralization of stress-related inflammation.
- 2 High wound healing properties.
- 3 Anti-stress wrinkle efficacy.
- 4 Dermal structure and cutaneous function protection.
- 5 Highly skin hydration effect.

Growth  
Factor-like  
Effect

Mind  
fulness-like  
effect



An ingredient made from *Curcuma longa* stem cells.

#### INCI

Curcuma Longa (Turmeric) Root Extract. Preservative free,

#### DOSAGE

Suggested use level: 0.5 - 2%.

#### EX VIVO & IN VIVO EFFICACY

Healthy skin

Stressed skin  
(hydrocortisone)

Stressed skin  
+ 1% TURMERIA ZEN™



Up to 89% and 96% protection of collagen and elastin degradation levels, respectively

#### Are you ageing? No stress

Significant reduction of wrinkle depth at 28 days.



#### APPLICATIONS

Cosmetic preparations for psychographic stress profiles, moisturizing products, anti-stress and well-being treatments, sensitive and sensitized skins, delicate areas (eye, lips, scars, etc.), scalp preparations, preventive cosmetics of psycho-induced aging and psycho-dermatological co-adjuvant.



# LUMINIA GRANATUM™

## The smart skin Brightener

- Natural lightening effect
- Texture and tone evener
- Radiance and glow enhancer



More even  
tone and  
texture

### Extremely effective brightening strategy

Did you notice the plants' power to **control skin pigmentation**?

What if you could lighten the spots more than the rest of your skin hue? That's **Smart Brightening**.

#### THE INGREDIENT

LUMINIA GRANATUM™ is a multi-step active ingredient from pomegranate that brings a superfruit power to fight against pigmentation imperfections in a synergistic way:

- 1 Improving skin brightness.
- 2 Whitening effect on dark spots.
- 3 Evening of skin tone.
- 4 Skin protection against oxidative stress after sun radiation.

ANTIOXIDANT  
Effect

Melanogenesis  
Inhibition

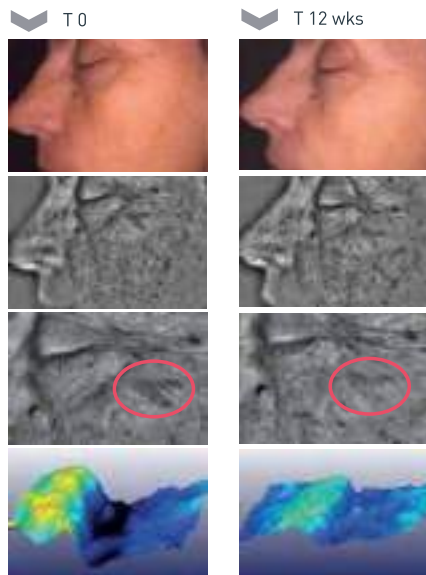
Up to 54%  
more intense  
Brightening  
Effect



An ingredient made from *Punica granatum* stem cells.

#### IN VIVO EFFICACY

Up to 74%  
melanin  
synthesis  
reduction



#### INCI

Punica Granatum Seed Extract. Preservative free.

#### APPLICATIONS

Brightening and lightening creams, prevention and treatment of photo-induced pigmentation, radiant and glowing cleansers, eye contour brightening treatments, skin tone evener, spot fading treatments, hand and décolletage products, outdoor-care and sun protection, anti-aging treatments.

#### DOSAGE

Suggested use level: 0.3 - 1%.

# ARABIAN COTTON™

The Broad-Spectrum protector against photo-aging

- Broad Spectrum Natural Photoprotection against Solar Radiation (UV/VIS/HEV/IR)
- BIO-protection against Photo-Induced Aging

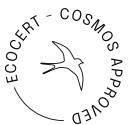


Photo-dermatology  
Global protection

## Protecting your skin in an all-in-one protection

Did you realize that plants are exposed to sun radiation, but they never get sun-burnt?

### THE INGREDIENT

ARABIAN COTTON™ is an active enriched in defensive molecules that protect and repair cell structures against sun damage:

- 1 Photoprotection against UV, IR and VIS radiation.
- 2 Fighting against photo-aging.
- 3 Broad-spectrum antioxidant effect.
- 4 Enhancement of cell viability.

Photo-protection against Blue Light

Up to 52% erythema reduction



An ingredient made from *Gossypium herbaceum* (Arabian cotton) stem cells.

### INCI

Gossypium Herbaceum (Cotton) Seed Extract.  
Preservative free.

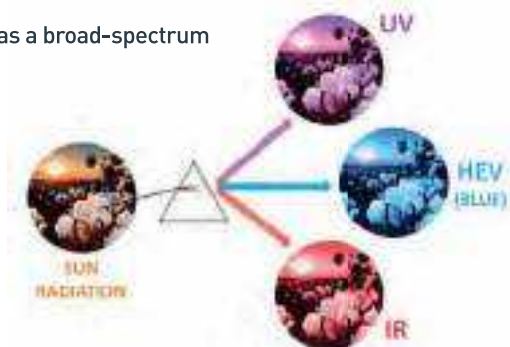
### DOSAGE

Suggested use level: 0.5 - 2%.

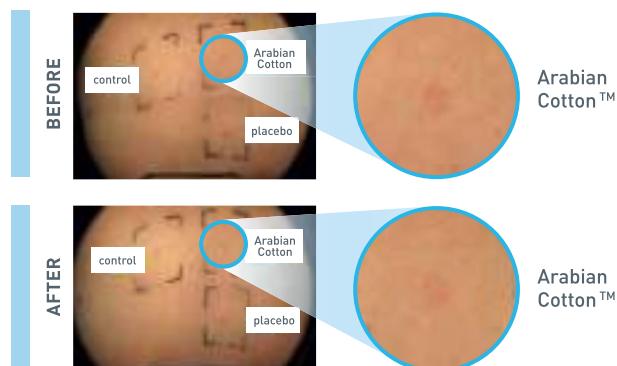
What if we could use plants' internal cream to protect your skin?

### IN VIVO EFFICACY

Potential as a broad-spectrum protector:



Erythema soothing after 2h:



### APPLICATIONS

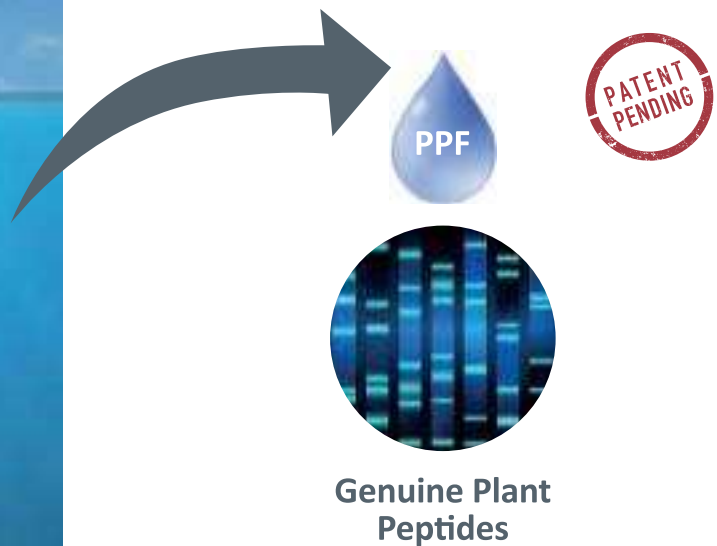
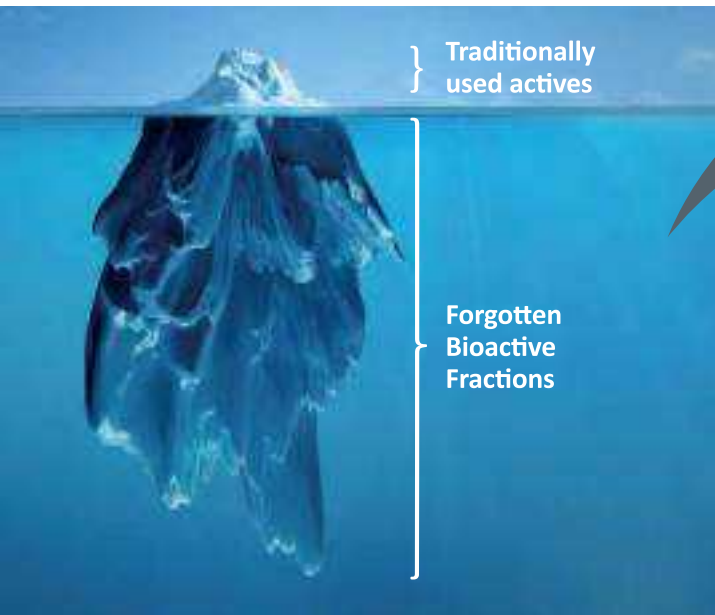
Inflam-Aging, IR'Aging, UV'Aging, Thermal'Aging, Sun deAGE, BROAD SPECTRUM PROTECTION: UV/VIS/IR, Reparative, Soothing.

Phyto-Peptidic Fractions™ represent the first generation of **genuine plant peptides**, a revolutionary discovery that opens the door to a new generation of cosmetics.

Vytrus Biotech, through a driven **Growth Factor Control** development process has been able to identify, produce and concentrate these Phyto-Peptidic Fractions™ from an optimized culture of totipotent cells.

These PPF are the ultimate responsible of the extremely high regenerative properties of totipotent cells and, for the first time, this astonishing potential can be used in cosmetics.

That makes of Phyto-Peptidic Fractions™ the first cosmetic active of this category able to maintain the skin regenerative potential.



What personal care ingredients from our portfolio have been developed based on the Phyto-Peptidic Fractions technology?



**CAPILIA LONGA™**  
Make your Hair Sprout again



**CENTELLA REVERSA**  
The Equation of Youth



# CAPILIA LONGA™

## Make your Hair Sprout again

- Epigenetic Reset of hair bulb
- Hair Follicle Regeneration
- Exclusive Nutritive Blend



### Hair Growth Re-Activation by genuine Plant Growth Factors

Have you seen that a tree **never stops growing** during centuries?

What if we applied these **plant growth factors** to our hair and made it grow again?

#### THE INGREDIENT

CAPILIA LONGA™ is an active that achieves hair growth reactivation through a biological approach: it produces an epigenetic reset of the hair bulb, re-starting the activity of Dermal Papilla Cells:

- 1 Boosts hair growth, density and quality.
- 2 Delays hair loss.
- 3 Activates the hair follicle regeneration.
- 4 Stimulates bulb microcirculation and nutrition.

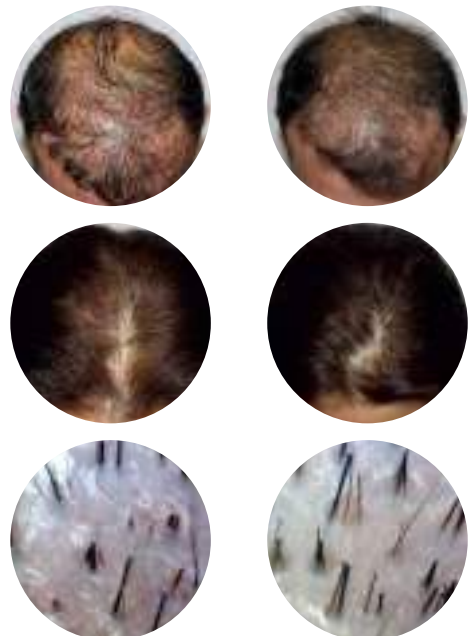
Up to **89%** hair loss reduction

Up to **52%** hair density increase

Average **13,500** new hairs

#### IN VIVO EFFICACY

If we can make a plant grow, why not hair?



T 0d

T 150d



An ingredient made from *Curcuma longa* stem cells.

#### INCI

Curcuma Longa (Turmeric) Root Extract.  
Preservative free.  
Other preservative versions also available.



#### APPLICATIONS

Prevention and reduction of hair loss, hair growth stimulation, hair re-densification, hair nourishing and strengthening products, treatments for fragile/weak/lacking volume hair types, eyelash and eyebrow growth enhancing products.

#### DOSAGE

Suggested use level: 0.5 - 2%.

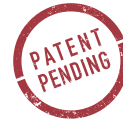




# CENTELLA REVERSA

## The Equation of Youth

- Reversion of cell senescence
- Rebuilding the core skin structure
- Global facial complexion improvement
- A plant rejuvenating strategy



EXCLUSIVE  
CENTELLA  
PEPTIDES

### A Global re-Youth effect

Did you know that plants can live hundreds of years due to their **regeneration abilities**?

#### THE INGREDIENT

CENTELLA REVERSA is an active from natural Centella peptides whose strategy originates a global rejuvenating effect:

- 1 Reversion of cell senescence.
- 2 Rebuilding the core skin structure.
- 3 Facial complexion improvement.

#### The Power of Natural Plant Peptides



An ingredient made from *Centella asiatica* stem cells.

#### INCI

Centella Asiatica Leaf Extract. Preservative free.

#### DOSAGE

Suggested use level: 1 - 3%.

What if we could apply these natural **regeneration properties** to your skin?

#### IN VIVO EFFICACY

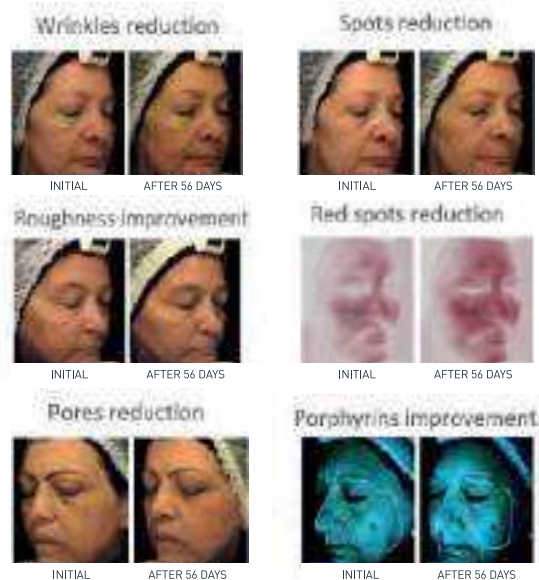
Up to **42.9%** reduction of wrinkle intensity and length.



INITIAL

AFTER 56 DAYS

Analysis of facial complexion by VISIA®



#### APPLICATIONS

Treatment and prevention of skin aging (serums, gel-creams, creams, masks), facial treatments, neck-necklines, hands; treatments for wrinkles, firming and anti-sagging treatments, skin blemishes and imperfections.



## Natural Innovation for a Better Life

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