

OxyRelax Cherry tree

Reinforcing antioxidating weapons

A STORY

The Cherry tree | *Prunus cerasus*, *Rosaceae*
An elegant and famous fruit tree

The cherry tree would come from Turkey and would have been introduced by Roman people in Europe after a military victory in that area. It can live till 100 years, and when blooming in spring, elegant white flowers appear. Although it doesn't last, its wood is highly sought by cabinetmakers for its amber colour and as a fine-grained wood. Besides, thanks to its synthetic reproduction, the smell of cherry is more and more common in the perfume industry.

Key points

An active plant cell

Developed to deliver the highest amount of original active molecules.

A high tech natural ingredient

Created to preserve and improve the identity and the benefits of a natural product.

A focused protective action

Reinforces cell natural protective mechanisms

Because the first outside aggression that affects skin is oxidation (due to UV, stress, pollution, etc.) it is necessary to help skin to better fight against it. To get a skin stronger and more efficient.



PRODUCT BENEFITS

Protection

Protecting and relaxing

Reinforces key cell defense mechanisms

Anti-oxidant

Slows down general cell oxidation, reduces excessive production of free radicals.

To be used in skincare or make-up products such as cream, fluid, serum, balm, lotion, milk, foundation, concealer, etc. In any cosmetic or skincare product dedicated to protecting skin from oxidation.

Anti-ageing

Helps skin cells to live longer by limiting damages caused by pollution, UV and tobacco.

NÆOLYS

Related products | GLOBAL PROTECT BLACKBERRY | OXYRELAX CALIFORNIA POPPY | WHOLE PROTECTION EDELWEISS

HOW IT WORKS

OxyRelax Cherry tree: focuses on key cell defense proteins and enzymes

Skin oxidation consists in the production of primary free radicals, that damage skin cells, from the membran to their DNA, therefore speed up their ageing.

OxyRelax Cherry tree will support the two natural cell weapons that neutralize that production: by increasing the action of anti-oxidation enzymes - superoxide dismutase and catalase - and by replacing the ultimate defense proteins, the HSP70 (Heat Shock Proteins), so epidermis cells can be relaxed.

Thanks to those actions, cells are supported and less in demand, then they can work longer and better answer outside aggressions.

in vitro testing results

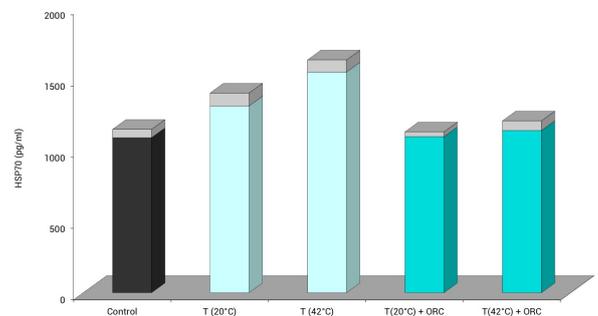
Anti oxidation reparation - the Heat Shock Proteins

To counterfight the stress coming from different origins (chemical or mechanical, either environmental, physiological or pathological), human cells produce specific defense proteins, especially stress proteins or heat shock proteins, that appear when the body experiences heat shocks. Because any temperature increase in our body, then in our skin, induces a protein modification, then damages their function.

Heat shock proteins are bioprotectors that preserve cells and their walls, by repairing special proteins, destroying too damaged proteins, and transporting proteins. The HSP 70 (70 Kdaltons is their molecular weight) regulate especially the stress coming from chemical aggressions (like heavy metals) and heat.

That is the reason why Naolys tested the ability of OxyRelax Cherry tree to regulate the synthesis of HSP70, therefore to relax cells, when they have to be exposed to a high temperature (42°C) therefore to preserve skin cells from damages induced by heat. Thanks to that mechanism OxyRelax Cherry tree allows a relaxation of cells and a better regulation of the synthesis of HSP70.

Study of the HSP70



Decrease of HSP70

→ At concentrations of 0.5%, significant decrease of the HSP 70 after incubation at low temperature (20°C): 16% and at high temperature (42°C): 27%.

Technical information Formulating OxyRelax Cherry tree

INCI name of cells
prunus cerasus leaf cell extract

form
cells (20%) in glycerin or sunflower oil (80%)

aspect
liquid

concentration
starting at 0.5%

dispersible
in any formulation

Study of the natural protection, superoxide dismutase and catalase / anti oxidation in skin

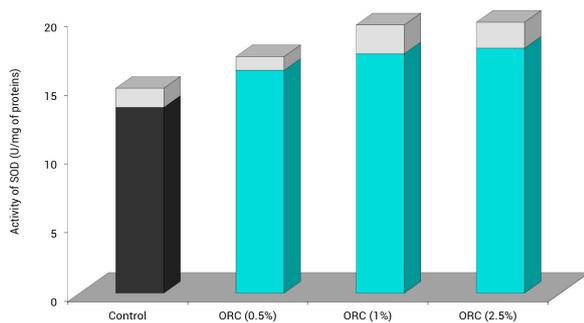
To protect itself from the formation of free radicals that damage cell structures, the human body developed a sophisticated system of defense enzymes, that act directly on the destruction of superoxyde ions (atoms or atom groups with an instable structure), the famous free radicals (or ROS), coming from the oxygen used for the respiration.

Two enzymes are working first in that defense: the superoxyde dismutase (SOD) and the catalase, which both of them fight against free radicals: SOD speeds up the transformation of superoxyde ions in hydrogen peroxyde then catalase converts it into water and oxygen. This way they prevent from the formation of carbone dioxide (CO₂) in the blood but also from the formation of toxins and DNA mutations.

They are the best control system on free radicals in our body. Nevertheless with ageing, their synthesis decreases.

Therefore Naolys studied the action of OxyRelax Cherry tree on both enzymes: superoxyde dismutase (SOD) and on catalase.

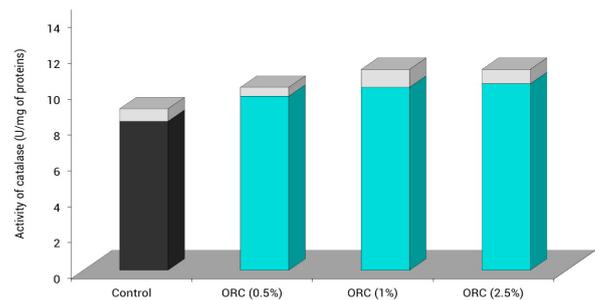
Study of the superoxide dismutase



Increase of the superoxide dismutase

→ At concentrations of 0.5%, 1% and 2.5%, increase of the activity of the superoxide dismutase respectively by 20%, 29% and 32%

Study of the catalase



Increase of the catalase

→ At concentrations of 0.5%, 1% and 2.5% , increase of the catalase respectively by 17%, 23% and 25%