

## **The four active ingredients:**

### **Aloe Vera Barbadosis**

There are at least 250 species of Aloe, but only a few of them have interesting Active Ingredients. Among them the richest of said Active Ingredients is the Aloe Barbadosis also known as Aloe Vera.

The Aloe Vera is considered as having the following interesting actions:

- Anti inflammatory
- Anti bacteria
- Anti irritation
- Purifying
- Preventive

Said properties of Aloe Vera seem to derive from a proteic molecule combined with a complex carbo hydrate, which, acting in combination with other active ingredients also present in the Aloe Vera, is likely to impact on several metabolic activities.

The Aloe Vera contains also:

- Vit. A, C, E, B,
- minerals like Zinc, Copper, Magnesium, Manganese,
- 20 out of the 22 aminoacids necessary to our organism
- various Enzymes
- Proteins and Mucopolysaccaroids

Moreover Aloe Vera is also recommended in case of wounds healing, psoriasis, burns including sun burns and scalds.

### **Calendula Officinalis**

Calendula Officinalis is a very common herb, acknowledgeable from the beautiful and peculiar color of its yellow or orange flowers and with a form similar to the daisy.

Its name is thought to derive from the Romans since it refers to a month period (Calendae). In fact Calendula Officinalis blossoms once per month and is likely related to a moon month.

The Calendula Officinalis is considered very useful for external use because the Active ingredients contained in it have optimal effect on a great deal of skin diseases including acne and chilblains, skin rash and skin inflammation of any kind.

It is also recommended for skin irritation on the babies derived from the use of pampers since the extract mobilizes the various soothing, anti inflammatory and wound repairing properties of the skin.

The tradition recommends to rub the Calendula flowers on the skin also in case of insect bites.

The main constituents are: Triterpenic Glucosides, Triterpenic Alcohols, Carotenoids, Flavonoids and Curarines, essential oils, polysaccaroids, nitro components, Vit. C and phenols.

### **Mimosa Tenuiflora**

The plant is known since the Maya time in Central- South America as the "tree of the skin" because of its exceptional properties of healing and soothing burns and ulcers. Mimosa has been recently rediscovered as biomedical product since it was of great help treating the victims of the earthquake in Mexico in 1985.

The active principals that have been identified as components of the Mimosa Tenuiflora extract are:

- flavonoids (of which two are particularly famous with the name Kukulkanin A and B,
- tannins
- oolyg minerals such as (Mn, Mg, Zn, Cu, Fe)

All the components operate in synergy since it is proved that the activity of the formulation inclusive of all said components is much higher than the activity of each single element.

The Mimosa extract in fact:

- favors the regulation of the periferic microcirculation antagonysing the fragility of the capillar veins and reinforcing the endotelium
- .Protects from the harm deriving from the free radicals and lipoperoxyds which create an oxydising stress with cellular membrane degradation
- regulates, in a modular way, the activity of enzymes related with the start of an inflammatory process (PLA2 lipo-oxygenasys) and in the processes of depolymerasation of the jaluronic acid (jaluronidasys)
- intervenes in the modular regulation of the mitotic potential of the tissues and favors the enzymatic reaction of the cellular metabolism
- prevents the growth of gram positive and gram negative bacteria, yeasts, fungi with a result similar to the one of known antibiotics. This effect has been also verified in the germs that are specifics in acne.

Lab. tests have proved the total harmlessess of the extract of Mimosa Tenuiflora.

In essence the extract of Mimosa Tenuiflora shows an activity of:

- endotelium protection
- anti-inflammation
- anti-microbic
- favoring the tissue reparation.

### **Phylcare Meristem (Quercus Robur)**

The “meristem” can be defined as the “stam cells” of a plant.

The “meristems” in fact are the lively part of the plant that generates its growth

The English Oaks (Quercus Robur) is particularly reach of “meristemes” with a peculiar strength.

The English Oak tree is diffused in the UK and in Europe..

The extraction process is, basically as follows:

- from the bud tissue it is obtained a first “total” or “all-inclusive” extract.
- then the active part is separated thru a cromatographic column
- said extract is purified by a precipitation of albumin

The process involves very complex phases at the end of which a mixture of redox radicals with odd stabilised electrons is obtained.

Said complex molecules create a system of electron donors-receivers able to stabilize the free radicals, which is the base of the biological action of the substance.

The composition can also be defined a compound of “polyradical-quinonic- derivatives”.

The Quercus Robur Meristemeis biologically active on the tissues with remacable anti-inflammatory and anti-allergic activity.

It can be used to treat and protect sensible skin or skin stressed by external threats.

Because of its radicalic character and its stabilising properties on the co-equivalent links, it favors the cross links that are so important in the chemical and mechanical stability of the collagene fibres.

The substance is respectful of the idro-lipidic –film that protects the skin, as well as of its slightly acid pH.

No contraindication also in case of frequent use.to protect against the aggressive action of the sun, the wind, the pollution and any other irritating or allergenic agent.

Insummary the extract presents the following properties:

- anti-inflammatory
- anti-allergic
- anti-itching
- increase of the immunitarian protection of the skin

- reparation of the damages on the tissues
- anti-radical
- tonic (it strengthen the structure of the collagene fibres).