

FEEL THE SAVOR OF LIFE

Crevil

5

ACTIVE
INGREDIENTS

EFFECTIVE
FORMULA
WITH NATURAL
WHITENING

ELAINE PERINE
WHITENING
INTIMATE

INTIMATE
PART

ELAINE PERINE



WHITENING INTIMATE

HUMAN SKIN COLOR

Human Skin Color variable all around the world, it range from darkest brown in some area such as Africa, Australia to lightest hues in some Northern Europe.

Genetics present an individual skin pigmentation, being the product of both of the individual's biological parents' genetic makeup, and exposure to sun. Different populations have different allele frequencies of these genes, and it is the combination of these allele variations that bring about the complex, continuous variation in skin coloration we can observe today in modern humans. In evolution, skin pigmentation in human beings evolved by a process of natural selection primarily to regulate the amount of ultraviolet radiation penetrating the skin, controlling its biochemical effects.

INTIMATE PART

An intimate part, personal part or private part is a place on the human body which is customarily kept covered by clothing in public venues and conventional settings, as a matter of fashion and cultural norms. In several cultures, revealing these parts is seen as a religious offence.

Definitions vary, but usually they are primarily the parts involved in sexual arousal, procreation, and elimination of excreta and related matter, including:

- for both genders: the buttocks, anus, perineum, mons pubis and groin
- for males: the penis and scrotum
- for females: the vulva (including pudendal cleft), vagina and breasts.

WHITENING INTIMATE

ELAINE PERINE Whitening Intimate is gentle and effective formula with natural whitening active ingredient. It prolong the calming and softening which suitable for intimate area

Active ingredients:

- Boerhaavia diffusa root extract
- Glycyrrhiza glabra root extract
- Aloe Vera extract
- Panthenol
- Retinyl Palmitate



1.

Boerhaavia diffusa root extract
(standardized in boeravinones)

Commonly known as punarnava in Sanskrit, is a plant that belongs to the Nyctaginaceae family.

It contains diverse components, such as flavonoids, alkaloids, steroids, triterpenoids, lipids, lignins, carbohydrates, proteins, and glycoproteins.

Boeravinones are the main rotenoids contained in its root, and several different ones have been identified: Boeravinone A to F



2.

Glycyrrhiza glabra root extract

It is cultivated extensively in India and has been used in traditional Chinese medicine.

Act as dispersing the melanin, inhibit of melanin biosynthesis

- Contain Glabridin, which is polyphenolic flavonoid. It decreases free radical production effect to inhibit cyclooxygenase activity to exerts anti-inflammatory
- Contain Liquiritin which is a glycoside containing flavonoid that induces skin lightening by dispersing melanin
- Has been tested in the treatment of melasma with good results and very mild irritation



3.

Aloe Vera Extract

Historically, Aloe vera was used topically to heal wounds and for various skin conditions. It contains various of potentially active constituents such as Vitamins, Enzymes, Minerals, Salicylic Acid and Amino Acid.

- It provides protective skin barrier that help to keep skin moisture locked
- It promotes new skin cell growth which improves skin appearance, gives the skin clear and smoother appearance
- It's a natural skin care for minor skin problem such as skin irritation, inflammation and other skin conditions



4.

Panthenol

Panthenol is a provitamin B5, when applied topically, panthenol is converted to pantothenic acid, it works as humectant, retaining moisture deep within the skin tissues. It prevents transepidermal water loss (TEWL) by protecting the skin barrier function and helping to soothe a dry skin



5.

Retinyl Palmitate

Retinyl Palmitate is the ester of retinol and palmitic acid. Topical application of Retinyl palmitate on the skin, after absorption, it converted to retinol and ultimately to retinoic acid which is the active compound to creates the cell regeneration and exfoliation action within the skin. It improves skin tone and smoother appearance.



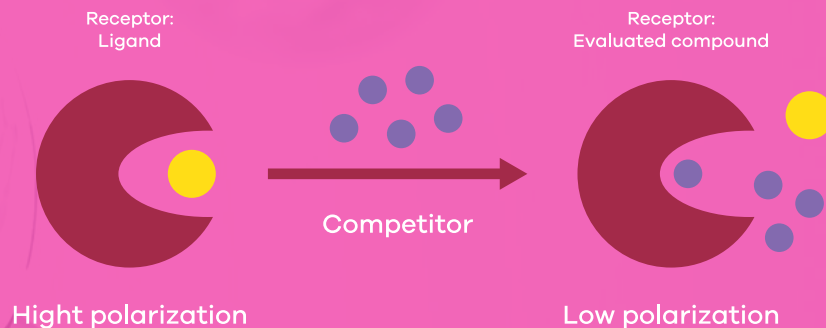
1. BOERHAAVIA DIFFUSA ROOT EXTRACT (Standardized in Boeravinones)

Boerhaavia diffusa has a long history of being used by indigenous and tribal peoples, in Ayurvedic medicine, and as a natural remedy.

In vitro efficacy

1.1 PPAR γ binding affinity

To validate the previously performed in silico study, the binding affinity of standardized in boeravinones was verified with a PPAR γ competitive binding assay (Polarscreen™ PPAR Competitor Assay).



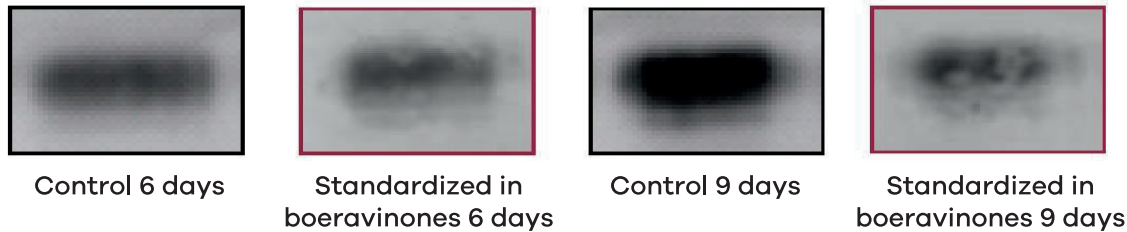
Result: Standardized in boeravinones has good binding affinity to PPAR γ , showing an IC₅₀ between 0.24 % and 0.33%.

Standardized in boeravinones shows good binding affinity to PPAR γ , acting as a natural agonist

1.2 . Study on depigmentation activity in human melanocytes

1.2.1 Evaluation of tyrosinase expression

To determine the amount of tyrosinase, the Western Blot technique was used, with the primary mouse antibody anti-Tyrosinase. The bands obtained were quantified by densitometry. The results obtained with the active ingredient Standardized in boeravinones were compared to a culture without any product (negative control).

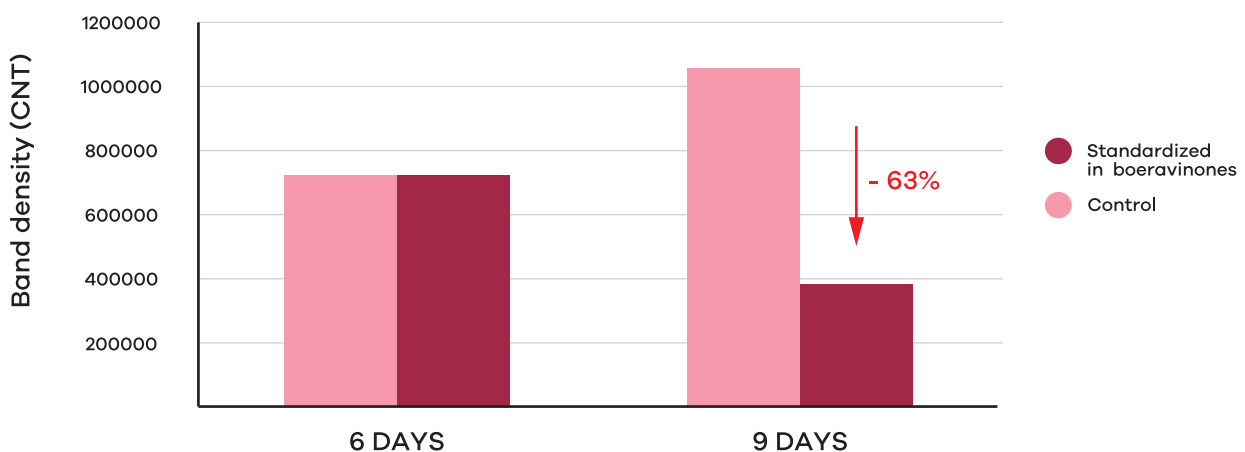


The images of the Western Blot bands may be seen below, corresponding to the enzyme tyrosinase throughout the different incubation times.

It was observed in the negative control culture that the expression of the enzyme tyrosinase had significantly increased upon increasing the melanocyte incubation time. This reflects important melanogenic activity in the cells, with a consequent increase in tyrosinase production.

After 9 days of incubation, a very faint band was observed that reflected a lesser quantity of tyrosinase. We can thus see that, as a consequence of PPAR γ activation, Standardized in boeravinones causes a decrease in the expression of the key enzyme of melanogenesis in human melanocytes.

REDUCTION OF TYROSINASE EXPRESSION



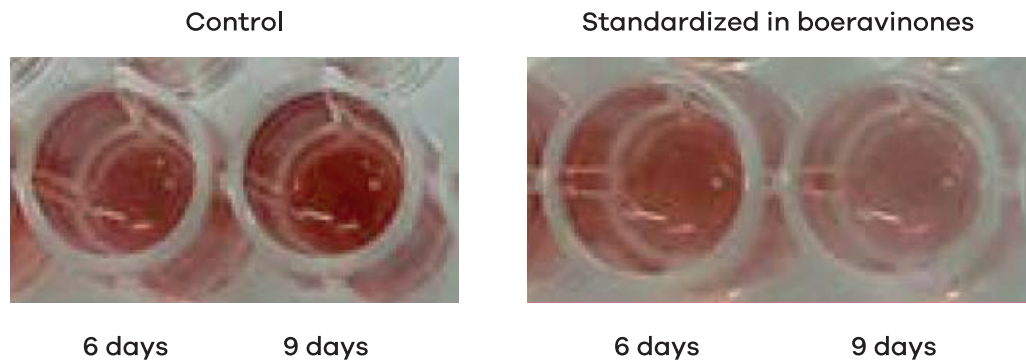
Results from the tyrosinase expression assay

Standardized in boeravinones reduces tyrosinase enzyme formation by 63%, therefore it causes a reduction of the melanogenesis

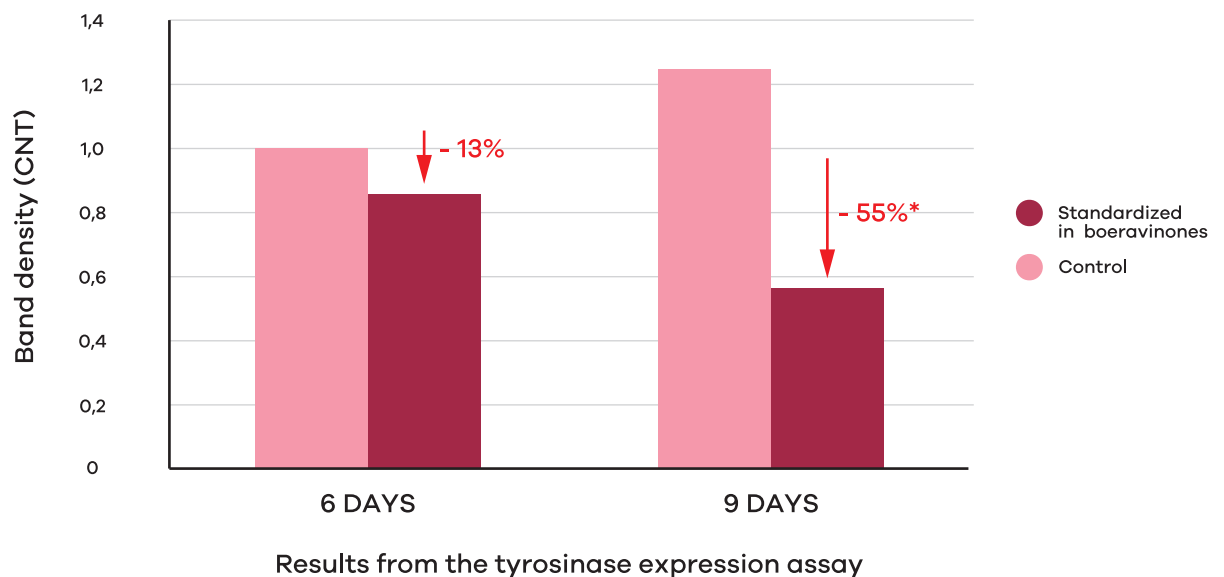
1.2.2 Evaluation of tyrosinase activity

The coloration of the cultures during the measurement of dopa oxidase activity. Greater coloration in the well indicates greater enzymatic activity. Low dopa oxidase (coloration) activity is observed in the cultures treated with Standardized in boeravinones, and this decrease is most evident after 9 days of incubation.

Representative image of the Dopa-oxidase activity



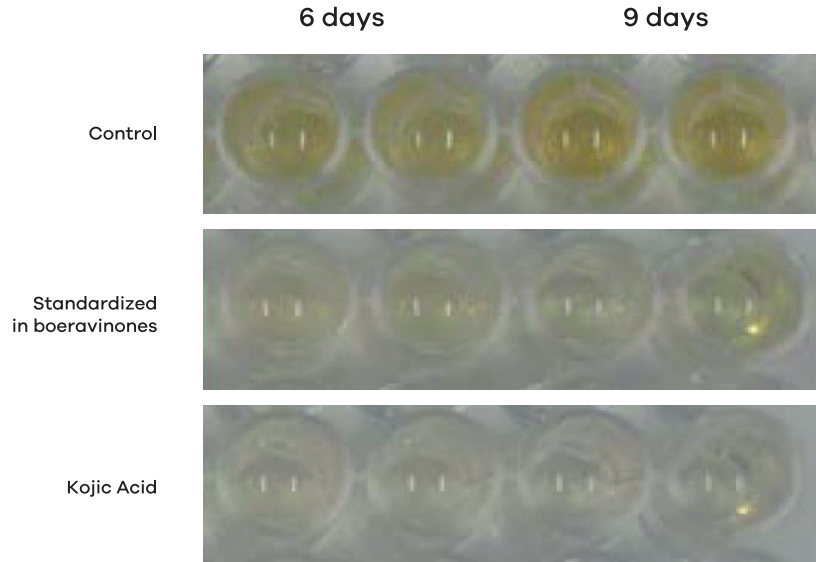
REDUCTION OF TYROSINASE EXPRESSION



* Standardized in boeravinones reduces tyrosinase activity by 55% and, consequently, is a powerful depigmentation agent

1.2.3 Evaluation of melanin quantity

Two controls were used: a culture without any product (negative control) and a culture with 100 ppm Kojic acid (positive control). The following figure shows an image representing the melanin assay, where we can see the production of melanin in the different cultures, the different incubation times, and in duplicate. Low production (coloration) of melanin is observed in the cultures incubated with Standardized in boeravinones and with the positive

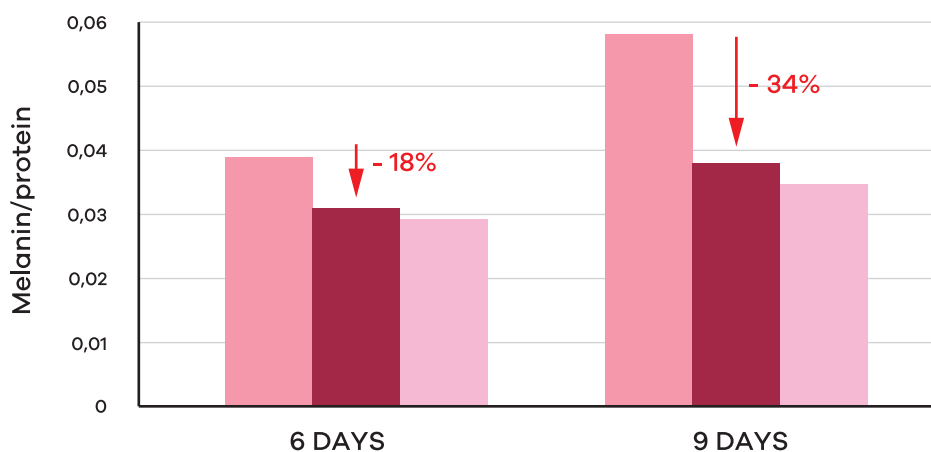


This study showed how the decrease in tyrosinase activity and expression translates to a real decrease in the amount of pigment synthesized by human melanocytes

These results showed a significant decrease in the melanin/total protein ratio after 9 days of incubation with the active ingredient Standardized in boeravinones. These ratios are very similar to those obtained with the positive control (Kojic acid) under the same assay conditions.

It should be noted that **Kojic acid caused a decrease in the amount of protein in the cultures, which implies a toxic effect on cells.** The reduction was 11% at 6 days of incubation, and 26% after 9 days. In contrast, Standardized in boeravinones did not cause any protein reduction, recording cell viability practically equal to that of the control culture.

REDUCTION OF MELANIN QUANTITY

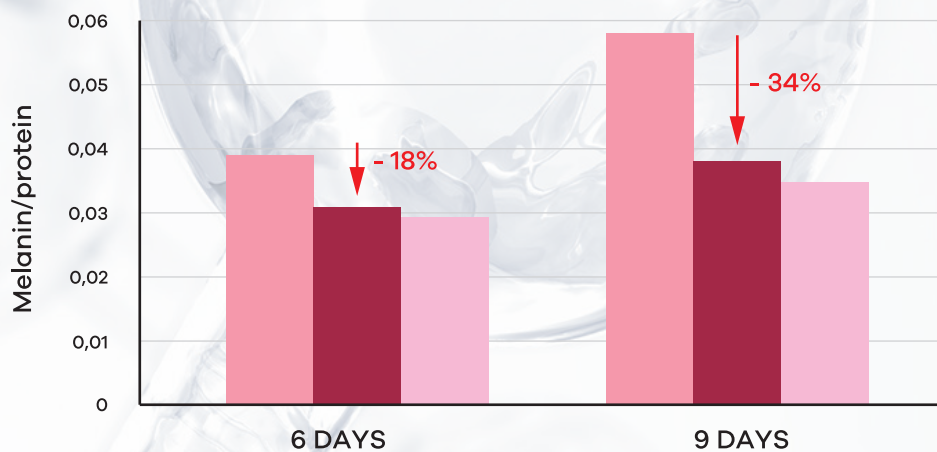


Results from the melanin quantification test

● Standardized in boeravinones
 ● Control
 ● Kojic Acid

Standardized in boeravinones decreases the amount of pigment synthesized by melanocytes by 34%, without affecting their viability

REDUCTION OF MELANIN QUANTITY

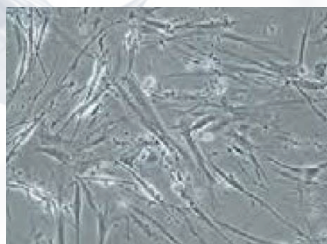


Results from the melanin quantification test

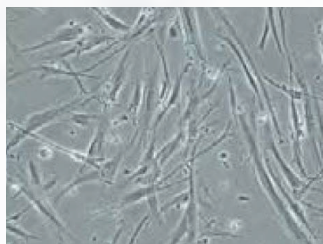
Standardized in boeravinones

Control

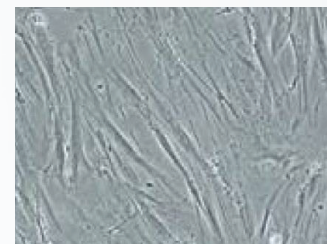
Kojic Acid



Control



Kojic Acid



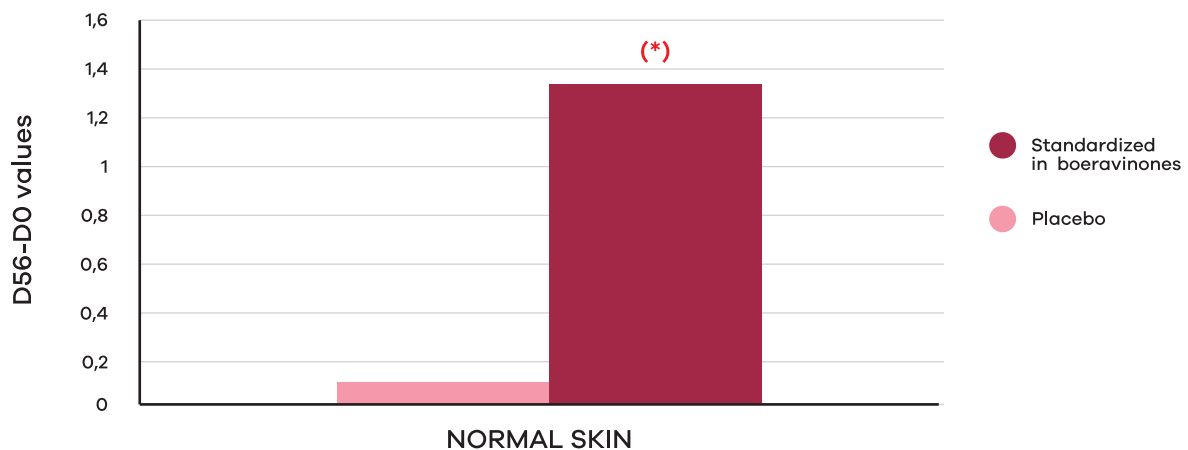
Standardized in boeravinones

Images show, the negative control presents the image of a typical culture that shows fusiform morphology, with the abundant dendrites characteristic of melanocytes. In the culture treated with Kojic acid, the morphology is maintained; however, the cellular density is less. Standardized in boeravinones maintains the viability of the melanocytes, with a cellular density similar to that of the control; however, we can clearly observe how the number of melanocyte dendrites decreases, potentiating the fusiform appearance of the cells much more.

This dendrite loss has decisive importance for melanogenesis, given that in an in vivo situation, the transfer of melanin to epidermal keratinocytes would be reduced, thereby avoiding the accumulation of pigment in the epidermis.

Standardized in boeravinones prevents an accumulation of melanin in the skin by reducing melanocyte dendrites

ITA° Variation



Results from the pigmentation intensity assessment
(*: Standardized in boeravinones statistically significant in comparison with D0).

Skin treatment with Standardized in boeravinones for 56 days reduces skin pigmentation. The ITA° parameter increases up to 28% in skin without spots, with a mean variation of 3%.

In vivo efficacy

A study was carried out with 20 Asian volunteers to evaluate the efficacy of Standardized in boeravinones as a cosmetic ingredient designed to reduce cutaneous pigmentation. 56 days of twice daily application in normal skin and spots

1. Evaluation of normal skin, without spots

- The lightening effect was assessed with a colorimetric instrument measurement, performed with a Spectrophotometer TMCM-2600D, Minolta. It was performed on a homogeneous facial area without spots on both sides of the face (active and placebo treatment).
- The individual typological angle (ITA°) parameter was calculated. If this parameter increases, it means that the intensity of cutaneous pigmentation has decreased.
- The following chart shows the ITA° values obtained with respect to the beginning of the study, for skin without spots, and the different treatments carried out.



2. LICORICE EXTRACT

(Glycyrrhiza Glabra Root Extract)

It is cultivated extensively in India and has been used in traditional Chinese medicine.

- Act as dispersing the melanin, inhibit of melanin biosynthesis and decreasing free radical production effect to inhibit cyclooxygenase activity.
- Contain Glabridin, which is polyphenolic flavonoid. It prevents Ultraviolet B induced pigmentation and inhibit superoxide anion and cyclooxygenase activity to exerts anti-inflammatory.
- Liquiritinis a glycoside containing flavonoid that induces skin lightening by dispersing melanin
- Has been tested in the treatment of melasma with good results and very mild irritation





3. ALOE VERA

Aloe Vera is a popular medicinal plant that is used in the cosmetic, pharmaceutical and food industries. It contains powerful antioxidants, known as polyphenols, helps inhibit the growth of certain bacteria. Topical application of Aloe Vera has been demonstrated to have a promising effect on the wound healing process. Vitamins and minerals in Aloe Vera helpful in protecting, make the complexion clearer and smoother and reduce inflammation.



4. VITAMIN B5 (PANTHENOL)

When applied topically, panthenol is converted to pantothenic acid, a component of coenzyme A and holo-fatty acid synthase that is essential to normal epithelial function. Clinical observations have reported that topically applied panthenol is an aid in superficial wound healing in burns, fissures, corneal lesions, and allergic dermatitis, and it is well tolerated, with minimal risks of skin irritancy. It prevents transepidermal water loss (TEWL) by protecting the skin barrier function as well.

5. VITAMIN A ESTER DERIVATIVES (RETINYL PALMITATE)

Retinyl palmitate is considered a less irritating form of retinol, Retinyl palmitate converts into retinol (or vitamin A), which converted into retinoic acid by specialized enzymes in the skin. The active compound that creates the cell regeneration and exfoliation action within the skin.



ELAINE PERINE



WHITENING INTIMATE

Is gentle and effective formula with natural whitening active ingredient. It prolong the calming and softening which suitable for intimate area. It can be applied to any intimate area like external genital area, anus, groin area and nipple without adverse effect

Crevil

NEW CESARIN

Ointment to eliminate
appearance of C-Section scars

