



Chrysalis natural oil extract

# Beautifying formula extracted from the purest Chrysalis Oil



Universidad Tecnológica de Pereira

### Target Markets / Potential Applications

- Skincare
- Haircare
- Suncare
- Dermocosmetic

### IP Status

Patent: [CO16055872](#)

**Offer:** Worldwide exclusive license of the technology and know-how transfer agreement to each potential application or target market.

Innovated, natural and nutritive chrysalis oil developed for the beauty industry.

Innovators of the *Universidad Tecnológica de Pereira* have developed a novel chrysalis oil that is made from purest, organic, nutritive, and stable ingredients of nature for beauty and personal care.

The increasing preference for organic and natural-based cosmetics in conjunction with a healthy lifestyle and the predominant use of skincare products, make chrysalis extract an optimal ingredient to be used in cosmetic applications as an alternative to conventional chemicals.

This innovative product is microbiologically stable, it is composed of unsaturated fatty acids, and it provides vitamin A, vitamin E, proteins, essential amino acids, folic acid, sugars, trace elements, phosphorous, sulfur, and nitrogen in different forms.

### Benefits



Hydration



Skin regenerator



Nutrition



Increases the elasticity of the skin



## The need

Cosmetic care is one of the essential needs of people who want to look young, with a preference for natural and they have daily routines for skin; **they feel the need to staying young in front of your social circle**. However, the risk associated with the use of conventional chemical products, still approved by law and presenting severe health problems for consumers, including parabens, phthalates, preservatives, dyes, fragrances, petrolatum, and others, have promoted the exploration of new natural raw materials to incorporate into cosmetic formulations.

Therefore, it is necessary to develop a new product, following the world trend, that is of natural origin, healthy, safe, rich in essential nutrients, compatible with human skin and environment friendly.

## The solution

An organic (oil) pasteurized extract of living silkworm chrysalis **BOMBYX MORI LINN HIBRIDO PILAMO 1** with high microbiological stability for use in cosmetics.

The new oil is prepared from chrysalis pupae, stripped of impurities, which, after sacrificed, are dried to obtain the organic extract and finally subjected to a pasteurization process for subsequent analysis and commercial use as a high-quality cosmetic input.

In addition, it complies with the physicochemical and microbiological parameters established by law for this type of formulations, in accordance with the Colombian Technical Standards.



Fig. 1



Fig. 2

Fig. 1 Picture of a silkworm chrysalis BOMBYX MORI LINN HIBRIDO PILAMO 1

Fig. 2. Organic (oil) pasteurized extract (illustrative).

## Innovators

### Main innovator



Gloria Edith Guerrero Alvarez

PhD Chemical Sciences  
Professor and Researcher.  
Universidad Tecnológica de Pereira.

## Innovation Maturity

TRL4 – Prototyping stage (Lab validation)

- Physicochemical and microbiological parameters of the extract is tested and analyzed.

CRL2 - Market Awareness Stage:

- Worldwide market awareness related to the skin care market is completed.

What are the TRL & CRL?

## Other relevant information

### Printed book:

Guerrero, G. E. *Obtención de un aceite con alto contenido oleico a partir de gusano de seda bombyx mori linn híbrido pilamo 1 en estado larval vivo quinto instar.* CDR638.2 D948 – 2011.



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