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Skin Care

Newsletter PersonalCare 5/2021

MELATULINE® Natural Botox Variant

September 2021

MELATULINE® Spilanthes Acmella Extract

MELATULINE® is a natural, ecological cosmetic raw material obtained by extraction from the aboveground parts of *Acmella oleracea* plant grown in Polish Podlasie. Effective action of the raw material is ensured by the active substance called SPILANTHOL.

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Background of MELATULINE®

Isolated from *Acmella oleracea*, Spilanthol is a natural N-alkylamide, showing multidirectional biological activity, including antibacterial, anti-inflammatory, analgesic, antifungal and antihistamine effects. *Acmella oleracea* (synonymous with *Spilanthos Oleracea*, Jambu, *Spilanthos Acmella*) is a tropical plant, called toothache plant or herbal botox. In Poland it has recently been known for its ecological cultivation in Podlasie.



What arouses particular interest of the cosmetic industry is the ability of Spilanthol to reduce muscle tension, which in effect reduces the amount and depth of facial mimic wrinkles. It is

due to this property that cosmetics containing Spilanthol are called NATURAL HERBAL BOTOX. Concentrated extract from the aboveground parts of the *Acmella oleracea* plant, containing Spilanthol in adequate concentration exhibits tightening and firming properties. By relaxing the facial muscles, it helps to smooth and reduce visible wrinkles, which are partly caused by tense or contracted muscles. In addition to blocking the contraction activity of the facial muscles, Spilanthol also exhibits a curative effect (antibacterial, anti-inflammatory, antioxidant). Through the stimulation of fibroblasts, it boosts them to produce elastin and collagen. It also reduces skin defects caused by sun damage, environmental pollution or atrophy of subcutaneous soft tissue.

The treatment aimed at improving the condition of the face skin consists in the external application of the preparation (serum, cream, gel), which allows to eliminate the harmful effects of intramuscular injections (e.g. redness in the injection area, microhaematoma).

In addition, Spilanthol improves the absorption of other active ingredients of the cosmetic preparation, which contributes to the effectiveness of the cosmetic and reduces production costs.

Application and instrumental test

The application and instrumental tests were conducted with the participation of 20 volunteers, women and men aged 45 to 65 years. The preparation containing 2% MELATULINE® was applied twice daily over the course of 28 days.

The efficacy of the preparation was assessed using a specialized measuring device of LMI Technologies GmbH (Primos 3D Lite) and visually under the control of a dermatologist, observing changes in the "eye" zone (crow's feet) and in the "forehead" zone (horizontal wrinkle on the forehead and lines between the eyebrows). The tests were performed before the application (D0), after 6 hours (D6h), after 1 day (D1) and after 28 days (D28) of regular application

Immediate effect of smoothing out mimic wrinkles of the face!

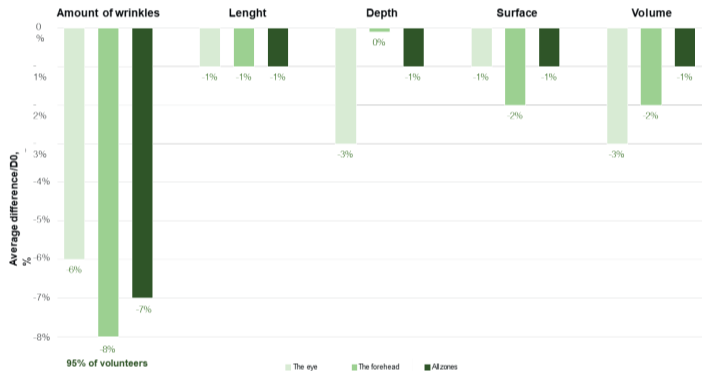


Fig. 1 Effect of wrinkle reduction following the first application (D6h)

The effects of Spilanthol are visible following the first application of the preparation containing 2% MELATULINE®. The results of the measurements showed smoothing of frontal wrinkles by 8% and reduction of "crow's feet" by 6% already after 6 hours.

Long-term effect of wrinkle reduction

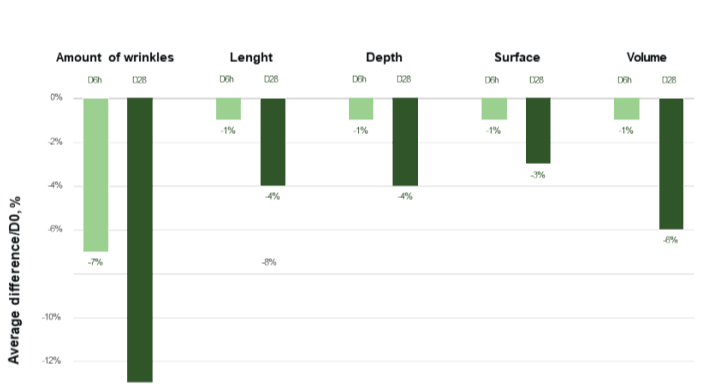


Fig. 2 The effect of wrinkle reduction following the first application (D6h) and following 28 days of treatment (D28)

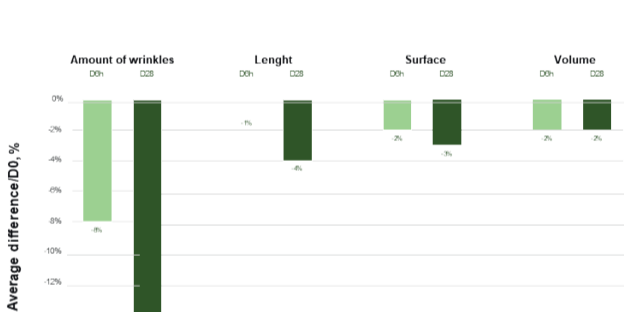


Fig. 4 The effect of wrinkle reduction in the "forehead" zone following the first application (D6h) and following 28 days of treatment (D28)

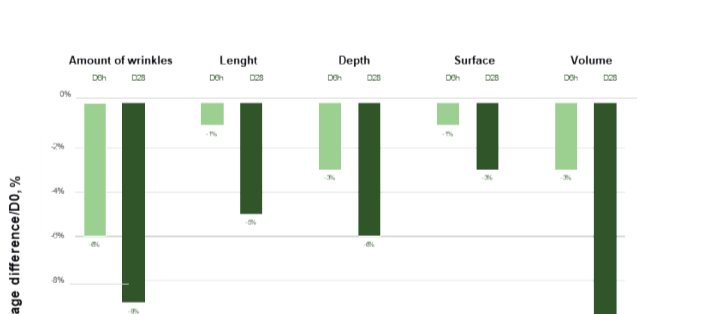


Fig. 3 The effect of wrinkle reduction in the "eye" zone following the first application (D6h) and following 28 days of treatment (D28)

The effects observed after 6 hours are even more pronounced after 28 days of regular treatment, which confirms the long-term effect of Spilanthol.

After 6 hours, an average wrinkle reduction of 7% was recorded, and after 28 days of application, as much as 13%.

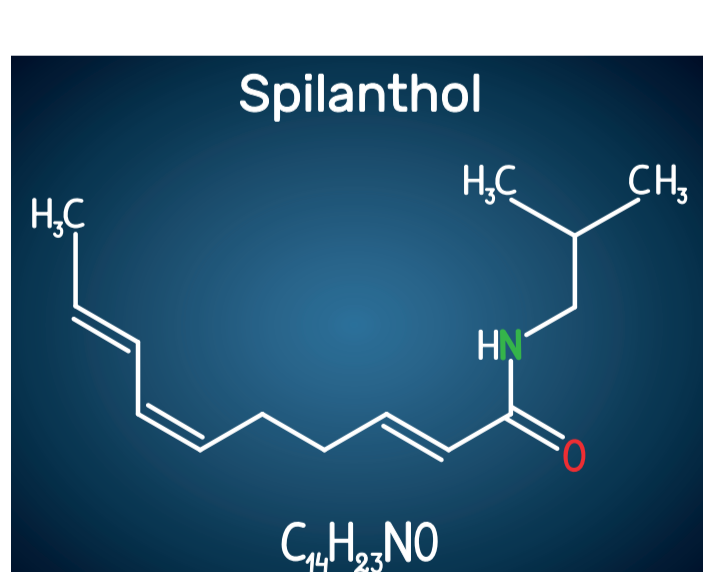
The positive effect of facial wrinkles reduction was observed in 100% of volunteers!

Application tests volunteers % satisfaction

The opinion of volunteers testing the effectiveness of MELATULINE®

- 85%** Improved facial skin condition
- 80%** Wrinkle reduction effect;
- Improved facial skin firmness
- 65%** Reduction of skin discoloration

As many as 80% of the volunteers stated that, the product reduces the noticeability of wrinkles and makes their skin firmer. 85% of the testers observed an improvement in the condition of the facial skin, and 65% noticed that the product reduces the visibility of discoloration on the skin. The effectiveness and safety of the product was confirmed by the instrumental and application tests under the supervision of a dermatologist in the laboratory of J.S. Hamilton Poland Sp z o.o. [limited liability company].



Summary

MELATULINE® INCI Spilanthes Acmella Extract (and) Caprylic/ Capric Triglyceride

- Concentrated, containing SPILANTHOL
- High stability
- Standardized
- In a solvent compatible with the composition of typical cosmetics

The instrumental and consumer tests have confirmed that:

- Reduces the most visible signs of facial skin aging
- Reduces wrinkles noticeably
- Reduces mimic wrinkles
- Improves skin condition
- Fast and effective firming and tightening component
- Very well tolerated

Organoleptic properties

Appearance	oily liquid
Color	from pale yellow to yellow
Odor	weak, characteristic

Physicochemical properties

Total Spilanthol content	min. 500 mg/l
Solubility at 20°C	vegetable oils, fats; insoluble in water
Density at 20°C	0,93-0,96 g/cm3

Application

- **Face care**
Anti-aging and anti-wrinkle preparations modeling the oval shape of the face
- **Body care**
Firming and modelling



Imprint

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