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## Introduction:

Lavender oil is extracted mostly from the flowers of the lavender plant, a fragrant in nature, and have been used for making perfumes for centuries. The oil is very useful in aromatherapy and many aromatic preparations and combinations are made using lavender oil. Traditionally, lavender essential oil has also been used in dermocosmetics. The aim of this study is to show on human subjects the potential for diminishing the melanin of the skin, at the level of unreliable melanic spots (macules of diverse causes) by the mexametry method.



## Materials & Methods:

- Chemical determinations were made on lavender volatile oil, in collaboration with the Banat University of Agricultural Sciences using gas chromatograph (GC /MS) coupled with MSD 5975 mass spectrometer and equipped with a capillary column.
- The extracted oil was incorporated into a pharmaceutical form prepared in the Dermatofarmacy and Cosmetology Laboratory of the Faculty of Pharmacy in Timisoara.



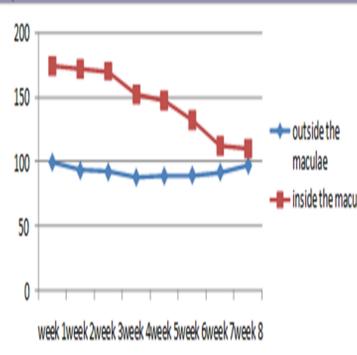
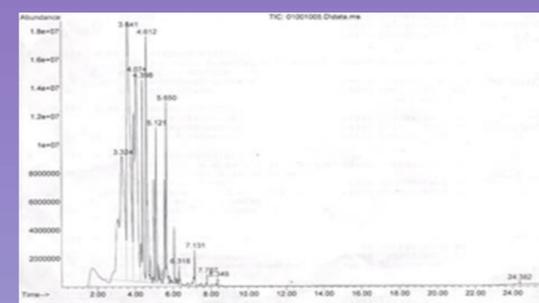
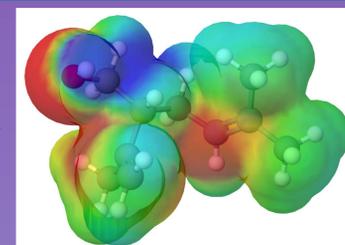
- After a preliminary cream test, to eliminate any risk of intolerance, a mexametric assay was performed on 15 volunteers, all women, aged between 22 and 64 years, which accepted to apply 2 times a day the product, for 2-month.

## References:

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2. Andrei F, Dumitrache E, Ersilia A, Maris L, Dragomirescu A (2016) A preliminary study on the skin depigmenting effect of Lavandula angustifolia oil , Abstracts of the international workshop of the Romanian-French bilateral project PN-CT-789/2014, ISBN 978-606-786024-5, 1:50
3. Fiocco D, Fiorentino D, Frabboni L, Benvenuti S, Orlandini G, Pellati F, Gallone A (2011). Lavender and peppermint essential oils as effective mushroom tyrosinase inhibitors: A basic study, Flavours Fragr. J. 26, 441-446

## Results & Discussion:

The chemical composition research concluded that the (R)-Lavandulol is the more active chiral component, in the visual and analytical model. The comparative chromatographic analysis shows that the main components of Lavandulol, irrespective of the source analyzed, are linalool and linalyl acetate.



### Results concerning the dermocosmetic assay:

- The melanin values for the 15 volunteers were calculated as arithmetic average, for 2 cutaneous areas: near (outside) the melanine macula and respectively inside the melanine macula.
- We appreciate that the lavender oil can be not only a flavouring but an active cosmetic ingredient

## Conclusions:

This study adds an important role to Lavandulol, besides the aromatherapeutic or cosmetologic properties, which elevates Lavand on another level, more attractive to the cosmetic industry and prescribing dermatologists, as a powerfull depigmentant.

## Aknowledgments:

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