



5<sup>th</sup> International Conference & Exhibition on

# Herbal & Traditional Medicine

November 05-06, 2018 | London, UK

## Posters

Herbal Conference 2018

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## Development of an anti-aging gel with natural products: hydro-alcoholic extracts and essential oils of two species of *Salvia* ssp

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*Salvia officinalis* L. and *Salvia elegans* are perennial plants belonging to Lamiaceae family. New reviews are highlighted pharmacological results attributed to *S. officinalis*, including anticancer, anti-inflammatory, antioxidant, antimicrobial, antimutagenic, antidementia, hypoglycemic, and hypolipidemic effects. The phytochemicals reported from *S. officinalis* have been isolated from its essential oil, and infusion preparation. More than 120 components have been characterized in the essential oil of *S. officinalis* (Ghorbani Esmailzadeh, 2017). The objective of this study was to create two anti-ageing gels (Carbopol and Methylcellulose) using essential oil of *S. officinalis* and hydroalcoholic extracts of *S. officinalis* and *S. elegans*. The essential oil was used as preservative and the hydroalcoholic extracts were the bioactive compounds, since it is rich in phenolic compounds with antioxidant capacity. These formulas were put through several tests: stability, physicochemical, and acute toxicity evaluations. The toxicity test was established using *Daphnia magna* with objective of LC50 determination after 12 hours. Young daphnids are exposed to a range of concentrations of oil extracts, as well as hydroalcoholic extracts. For *S. officinalis* five oil concentrations were tested (0.15% to 2.50%) and for *S. officinalis* and *S. elegans* three hydroalcoholic extracts concentrations were tested (1.25%, 2.5%, 5%). Considering *S. officinalis*, results suggest a decrease in toxicity with time exposure, probably due to light and/or oxygen. Considering hydroalcoholic extracts, values of LC50 obtained suggest that, although following the same pattern, *S. elegans* exhibit lower toxicity compared to *S. officinalis*. Finally, results of Stability Test showed that all samples keep their original properties.

### Biography

Hugo Goes will complete his degree this year in Instituto Politécnico de Bragança and will start the Master studies in the Pharmacology and chemistry of natural products in Instituto Politécnico de Bragança and Salamanca University. He has published more than 15 posters and communications in several congresses and scientific meetings.

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