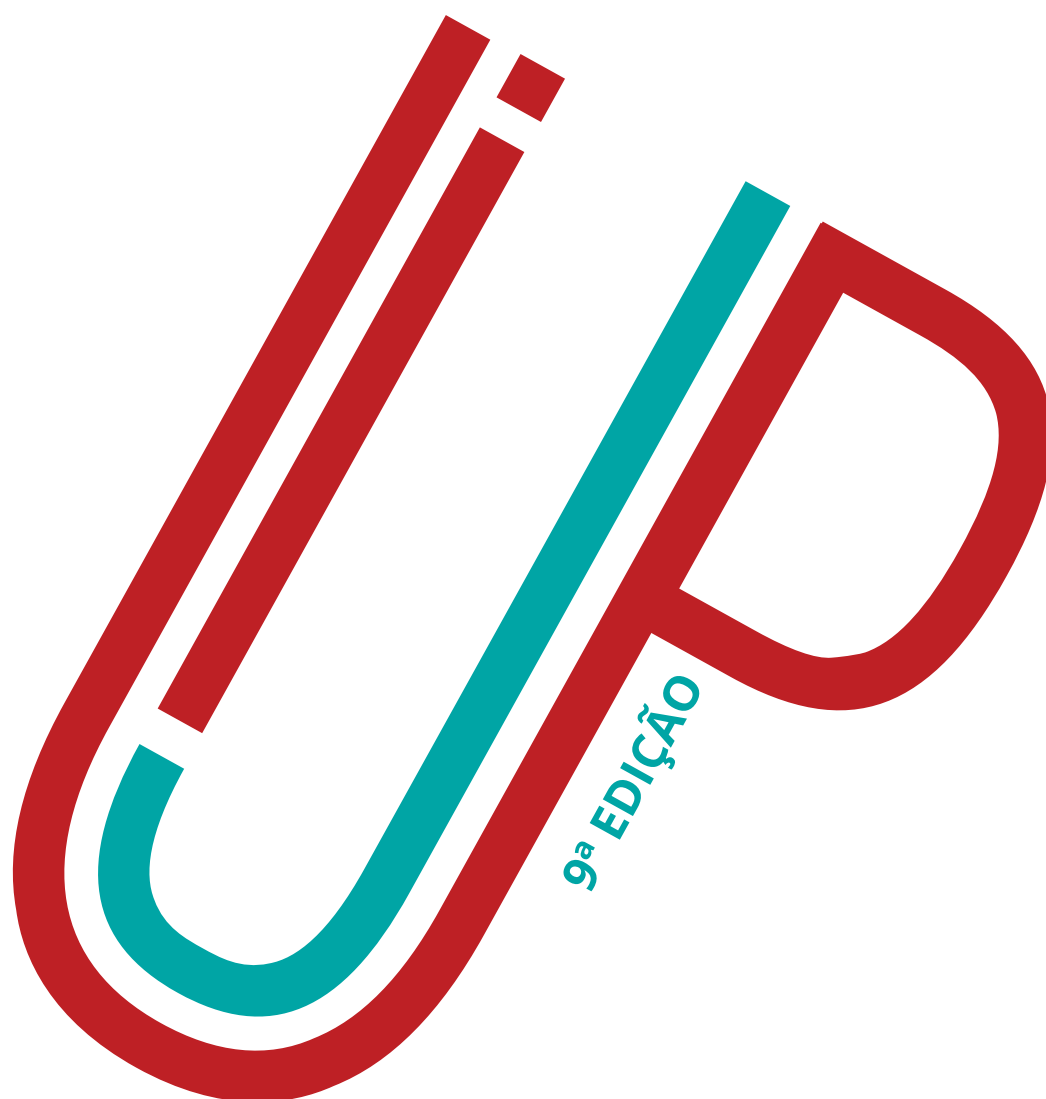
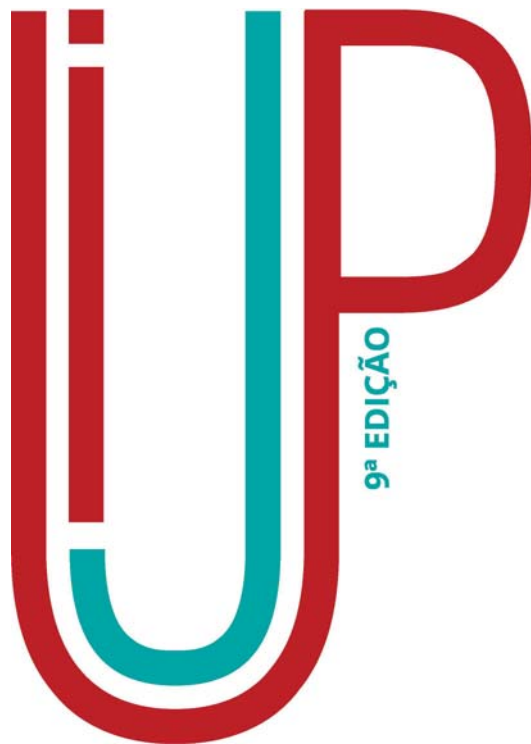


BOOK OF ABSTRACTS

9TH MEETING OF YOUNG RESEARCHERS
OF UNIVERSITY OF PORTO



U. PORTO



**ENCONTRO INVESTIGAÇÃO JOVEM
DA UNIVERSIDADE DO PORTO**

17.18.19 FEVEREIRO

U. PORTO

**ENCONTRO
INVESTIGAÇÃO
JOVEM**

ORAL SESSIONS



- **11198 | Development of paraben-free hydrogel based on *Coleostephus myconis* (L.) Rchb.f. plant extracts for topical application**

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Development of paraben-free hydrogel based on *Coleostephus myconis* (L.) Rchb.f. plant extracts for topical application

Coleostephus myconis (L.) Rchb.f. is a rich source of phenolic acids which are possibly associated with its high antioxidant activity. In the present study, hydroethanolic extracts from two different botanical parts of *C. myconis* (senescent flowers; green parts) were incorporated into hydrosoluble gels. Bearing in mind the EC50 values from previous antioxidant activity evaluation assays, gels were prepared using a concentration of 0.25 mg/mL (senescent flowers) and 0.50 mg/mL (green parts). Since the inclusion of parabens is nowadays poorly accepted by the consumers, imidazolidinyl urea was included as the antimicrobial component. Gels had a non-greasy texture and good dermic absorption dynamics. Regarding pH evaluation, there were no significant alterations during the 180 days of observation (5.5 and 6.5). The antioxidant activity of the prepared hydrogels was assessed and compared with a blank formulation and also with the results obtained for the extracts alone. The antioxidant activity measured in each hydrosoluble gel was very similar to the value obtained for the isolated extract, in what regards TBARS and β -carotene bleaching inhibition, DPPH and reducing power, thereby indicating the suitability of the *C. myconis* extract to prepare this type of dermocosmetic products.