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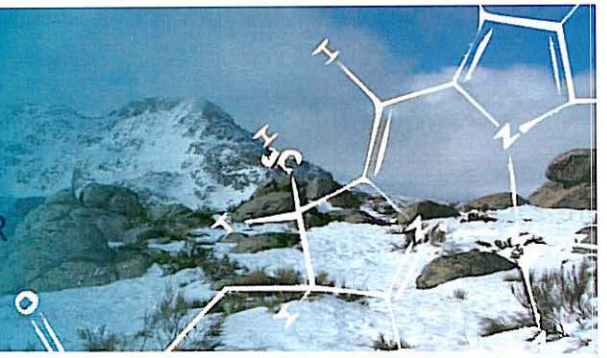

# 8º Encontro Nacional de CROMATOGRAFIA

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Faculdade de Ciências da Saúde
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## P.042. Chromatographic analysis of individual phenolic compounds in flowers and vegetative parts of wild *Taraxacum* sect. *Ruderalia*

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The vast genus of *Taraxacum* species, commonly known as dandelion, is often found in warm regions of the northern hemisphere. Used since ancient times in folk medicine for their curative properties, dandelion presents very interesting bioactive properties[1]. The incessant search and investigation for new and safe bioactive compounds is, nowadays, a milestone for ethnomedicine[2]. In the present work, the individual phenolic profile of the methanolic extracts, infusions and decoctions of flowers and vegetative parts of wild *Taraxacum* sect *Ruderalia* was evaluated by HPLC-DAD/ESI-MS, and compared. Hydroxycinnamic acid derivatives were the major phenolic acids found in the samples, including caffeic acid derivatives, caffeoylquinic acid derivatives and chicoric acid; the latter was the main compound in all the preparations of vegetative parts and also in flowers decoction. Regarding flavonoids, it was only possible to tentatively identify luteolin derivatives on flowers and quercetin and luteolin derivatives on vegetative parts. The flowers methanolic extract showed the highest flavonoids content, mainly luteolin *O*-hexoside (11.06 mg/g extract), while the vegetative parts extract gave the highest phenolic acids content (43.24 mg/g extract), mainly chicoric acid and its derivatives followed by caffeic acid and its derivatives. All the preparations showed similar phenolic profile although the methanolic extracts gave higher contents on total phenolics followed by infusions and decoctions. As far as we know, there are no previously reports on the comparison of the phenolic profile in different parts and preparations of dendalion. Due to the bioactive potential of phenolic compounds, further studies should be conducted in order to evaluate the role of the mentioned compounds in bioactivity of dendalion.

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