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Book of Abstracts of the 1st International Symposium on Profiling

**2nd - 4th
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S15. Phenolic profile of wild *Achillea millefolium* L. obtained by HPLC-DAD-ESI/MS

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Abstract

Achillea millefolium L., commonly known as yarrow, belongs to *Asteraceae* family and it is very common in mountain meadows, pathways, crop fields and homegardens. It is widely used in Europe as an herbal remedy to treat digestive problems, diabetes, hepato-biliary diseases and amenorrhoea, being also consumed for its antitumor, antimicrobial, anti-inflammatory and antioxidant properties [1,2]. Some studies related *A. millefolium* medicinal properties to the presence of phenolic compounds, namely flavonoids and phenolic acids [3,4]. In the present study, the phenolic profile of wild *A. millefolium* from the Northeastern Portugal was evaluated by HPLC-DAD-ESI/MS, after extraction with methanol:water (80:20, v:v). Twenty eight different compounds were identified: ten phenolic acids, in which 5-*O*-caffeoylquinic and 3,5-*O*-dicaffeoylquinic acids were the main compounds; eight flavones, namely different glycosylates forms of apigenin, being apigenin acylhexoside the major flavones; and ten flavonols, with quercetin derivatives as main compounds.

Overall, this study reveals that *A. millefolium* is an important source of bioactive molecules, namely phenolic compounds that could be related to its pharmaceutical and ethnobotanical uses.

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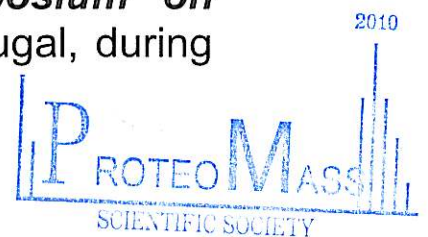
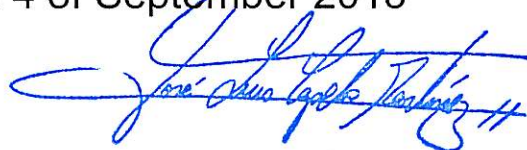
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CERTIFICATE

Hereby it is declared that

Maria Inês Dias, Lillian Barros, Montserrat Dueñas, Ana Maria Carvalho, M. Beatriz P.P. Oliveira, Celestino-Santos Buelga, Isabel C.F.R. Ferreira

Presented a shot-gun talk entitled "***Phenolic profile of wild *Achillea millefolium* L. obtained by HPLC-DAD-ESI/MS***" in the ***1st International Symposium on Profiling – ISPROF***, held in Caparica, Portugal, during days 2, 3 and 4 of September 2013



Prof. José Luis Capelo Martínez

Congress Chair