



10º Encontro Nacional de Cromatografia

Bragança 2017 – 4 a 6 de dezembro

Abstracts book / Livro de resumos



SOCIEDADE PORTUGUESA DE QUÍMICA



INSTITUTO POLITÉCNICO DE BRAGANÇA Centro de Investigação de Montanha

COM O ALTO PATROCÍNIO DE SUA EXCELÊNCIA



O Presidente da República

Title

10th Chromatography Meeting

Título

10º Encontro de Cromatografia

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Edition / Edição

Instituto Politécnico de Bragança · 2017

5300-253 Bragança · Portugal

Tel. (+351) 273 303 200 · Fax (+351) 273 325 405

<http://www.ipb.pt>

Imaging services / Serviços de imagem

Atilano Suarez (Instituto Politécnico de Bragança, Portugal)

URL

<http://hdl.handle.net/10198/8896>

ISBN

978-972-745-234-7



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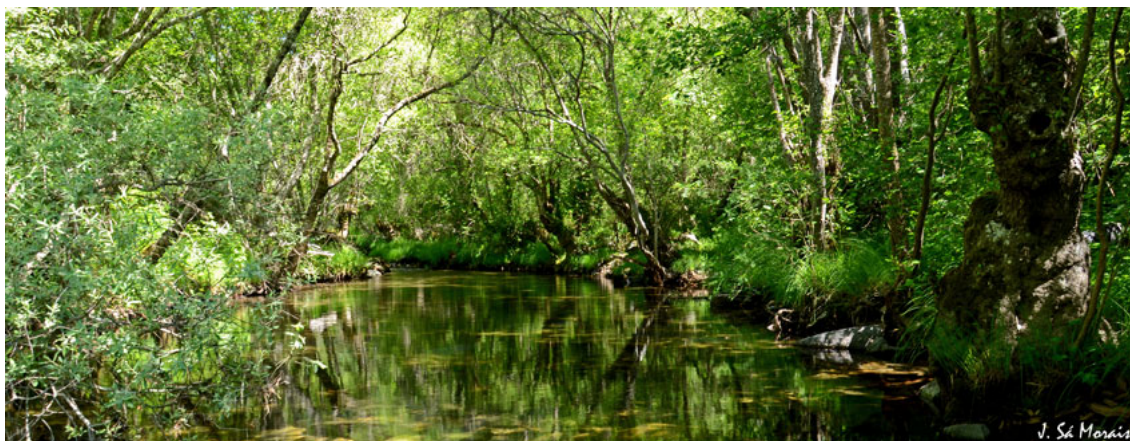
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Fingerprint of phenolic compounds in *Osyris quadripartite* Salzm. ex Decne. from Algeria

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Medicinal plants are known as being a rich source of bioactive components, which can be correlated with their biological effects. The present study focused on the valorization of the leaves of *Osyris quadripartite* Salzm. ex Decne. with recognized folk medicinal uses in some Africa countries, namely Algeria [1, 2]. Therefore, the aim was to perform a phytochemical characterization, regarding phenolic composition, of *O. quadripartita* aqueous extracts and two different organic fractions (n-butanol and ethyl acetate), by using high-performance liquid chromatography coupled to a diode array detection and electrospray ionisation mass spectrometry (HPLC-DAD–ESI/MS). The separation was achieved with a Waters Spherisorb S3 ODS-2 C18 (4.6 mm × 150 mm, 3 µm), using a gradient elution, with 0.1% formic acid in water and acetonitrile. Twenty-eight individual phenolic compounds were identified: fifteen flavan-3-ols, six flavones, four flavonols, two phenolic acids and one flavanone derivative. The ethyl acetate fraction presented the highest concentration in phenolic compounds, being (+)-catechin and procyanidin dimer B1 (EC-4,8-C) the most abundant compounds (110.5 ± 0.3 and 100.5 ± 0.3 mg/g extract, respectively). The aqueous extract and the n-butanol fraction presented similar contents of phenolic compounds, being quercetin-3-*O*-rutinoside the main molecule present (33.8 ± 0.1 and 17.70 ± 0.02 mg/g extract, respectively). Moreover, the phenolic profiles of all fractions and extracts presented similarities in their qualitative composition, although some differences were observed, especially in the ethyl acetate fraction, where no flavone derivatives were present. This study highlights the potential of *O. quadripartita* fractions, rich in phenolic compounds, to be used in food, pharmaceutical and cosmetic fields.

Acknowledgements:

The authors are grateful to FCT and FEDER under Programme PT2020 for financial support to CIMO (UID/AGR/00690/2013), L. Barros and R. Calhelha contracts; to Interreg España-Portugal for financial support through the project 0377_Iberphenol_6_E; and to the Universities of Oran 1, Abdelhamid Ibn Badis Mostaganem and the LRZA (Algeria) for financial support of W. Rached.

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