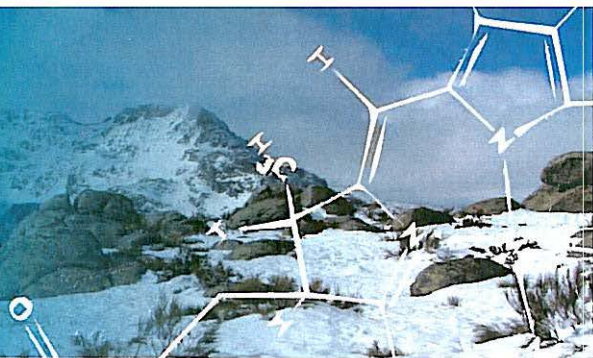




UNIVERSIDADE DA BEIRA INTERIOR
Covilhã | Portugal



8º Encontro Nacional de CROMATOGRÁFIA

2, 3 e 4 | Dezembro | 2013

Faculdade de Ciências da Saúde
Universidade da Beira Interior

LIVRO DE RESUMOS



Centro de Investigação em Ciências da Saúde
Health Sciences Research Centre



UBI
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Segunda-feira, 2 de Dezembro

08:00-09:00	Registo dos participantes	
09:00-09:30	Sessão de abertura	
09:30-10:30	Comunicação Plenária: Ultra-High Performance Liquid Chromatography: Fundamentals, Developments and Applications in the Determination of Multiresidues of Pesticides - Isabel Jardim (Universidade Estadual de Campinas- IQM UNICAMP, Brasil)	
10:30-11:00	Café e sessão de posters	
11:00-11:30	Comunicação Convidada: Trends on automation of sample preparation based on bead injection technique - Marcela A. Segundo (FFUP)	
	Sessão Oral I	
11:30-11:50	High Performance Liquid Chromatography analysis of anthocyanins for varietal differentiation of <i>Vitisvinifera</i> L. red grapes – Fernanda Cosme (IBB/GCB-UTAD)	
11:50- 12:10	Latest technological advances in high resolution mass spectrometry: ORBITRAP mass spectrometry – Sílvia Maia (CEMUP)	
12:10-12:40	Seminário Tecnocroma	
12:40-14:00	Almoço	
14:00-14:30	Comunicação Convidada: Bidimensional Liquid Chromatography for Bioanalysis - Eugênia Queiroz (Universidade de S. Paulo - FFCRLP, Brasil)	
14:30-15:00	Comunicação Convidada: The role of chromatography in Forensic Toxicology - Mário Barroso (INMLCF)	
	Sessão Oral II	Sessão Oral III
15:00-15:20	Phenylethanoid glycosides in <i>Veronica urticifolia</i> extracts: characterization by HPLC-DAD-ESI/MS – João C. Barreira (CIMO-IPB)	Quantitative analysis of opicapone and its active metabolite in rat matrices by high-performance liquid chromatography coupled to a diode array detector – Daniela Gonçalves (FFUC)
15:20-15:40	Influência dos produtos da reação de Maillard isolados do malte por cromatografia de exclusão molecular na inibição da isomerização do xantohumul – Daniel O. Carvalho (REQUIMTE-UP)	Naproxen molecularly imprinted microspheres: two different approaches combining sol-gel and water-in-oil microemulsions – Mariana Ornelas (CIQ-UP)
15:40-16:00	Phenolic profile of wild fruits of <i>Rosa micrantha</i> ex Sm. and <i>Rosa canina</i> L. from Northeast Portugal – Lillian Barros (CIMO-IPB)	Encapsulação de Cafeína e Diclofenac em Carvão Activado e MOF ZIF-8 – Catarina João (IPB)
16:00-16:30	Café e sessão de posters	
	Sessão Oral IV	Sessão Oral V
16:30-16:50	Solving complex natural matrices with comprehensive two dimensional gás chromatography: <i>Sambucus nigra</i> L. volatile terpenoids characterization – Ângelo C. Salvador (QOPNA-UA)	Application of bar adsorptive micro-extraction (BA μ E) for trace level analysis of testosterone and epitestosterone in urine samples for screening purposes in anti-doping control context - Samir M. Ahmad (FCUL)
16:50-17:10	Seeds and stones from <i>Olea europaea</i> : phenolic compounds and antioxidant capacity – Maria Rosário Bronze (FFUL)	Desenvolvimento de uma metodologia analítica para a determinação de novas substâncias psicoativas em amostras biológicas – Cláudia Margalho (INMLCF)
17:10-17:30	Influence of abiotic stress factors on rice volatile emission from Portuguese paddy fields – Eduardo P. Mateus (CENSE-UNL)	Chromatographic techniques for genotoxic impurities in pharmaceutical products – Sílvia Santos (Hovione)
17:30-18:30	Reunião Grupo de Cromatografia SPQ	
18:30-19:30	Vinho de Honra	

CO.05. Phenolic profile of wild fruits of *Rosa micrantha* ex Sm. and *Rosa canina* L. from Northeast Portugal

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Phenolic metabolites are common constituents of fruits and vegetables, and the interest of plant phenolic extracts derives from the evidence of their potent antioxidant activity and their wide range of pharmacologic properties including anticancer, antimicrobial and platelet aggregation inhibition activities [1]. *Rosa canina* L. fruits are eaten raw as snacks and possess prophylactic and therapeutic activities against a wide range of ailments. *Rosa micrantha* ex Sm. fruits are used to prepare homemade remedies that prevent or heal several human disorders and animal diseases [2] This study aimed to characterize the phenolic compounds present in the above mentioned wild fruits. The analysis of phenolic compounds was carried out by reversed-phase HPLC-DAD-ESI/MS, in order to establish the specific phenolic profile in two Rose species. *R. canina* and *R. micrantha* presented a very similar profile being detected different classes of flavonoids, but no phenolic acids were found in these samples. The highest flavone/ols (11.16 mg/100g), flavan-3-ols and galloyl derivatives (19.90 mg/100g), and anthocyanins (1.19 mg/100g) content were found in *R. micrantha* fruits. Taxifolin pentoside was the most abundant flavanone found in these fruits and represented 1.18 mg/100 mg for *R. canina* and 2.68 mg/100 g for *R. micrantha*. Methyl gallate hexoside was only found in *R. micrantha* (2.45 mg/100g). (+)-Catechin was the most abundant flavan-3-ol found in the samples (*R. canina* 3.59 mg/100 g and *R. micrantha* 4.93 mg/100g), whereas cyanidin 3-O-glucoside was the only anthocyanin detected (*R. canina* 0.68 µg/100 g and *R. micrantha* 1.19 µg/100 g). The studied fruits may have great potential for food industries as a source of colors and flavors, as well as bioactive molecules such as phenolic compounds for dietary supplements or functional foods.

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[1] M Heinonen, *Mol Nutr Food Res*, 2007, 51, 684-691.

[2] AM Carvalho, *Plantas y sabiduría popular del Parque Natural de Montesinho. Un estudio etnobotánico en Portugal*, 2010, Biblioteca de Ciências 35, Madrid: Consejo Superior de Investigaciones Científicas, Espanha.