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UNIVERSITY OF NIŠ

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## POSTER PRESENTATIONS

### Poster sessions:

*Session I:* Odd numbers (like PP1, PP3, etc.) – Friday, September 14

*Session II:* Even numbers (like PP2, PP4, etc.) – Saturday, September 15

\*Registration Fellowships founded by IFEAT and ISEO2018 Organizing Committee

PP1	<i>Tadaaki Satou</i> (Japan)	<b>The influence of two Lamiaceae essential oils on dementia-related symptoms in animal models</b>
PP2*	<i>Margita Utczás</i> (Hungary)	<b>Cannabis terpene profiling in therapeutic products by means of gas chromatography coupled with mass spectrometry</b>
PP3*	<i>Filomena Silva</i> (Spain)	<b>The use of essential oils for antimicrobial food packaging</b>
PP4	<i>Eleni Stavradi</i> (Greece)	<b>Chemical analyses of truffle flavored (<i>Tuber spp.</i>) olive oils on the Greek market with HS-SPME</b>
PP5	<i>Ana Dobрева</i> (Bulgaria)	<b>On the subcritical extraction of <i>Rosa damascena</i> Mill.</b>
PP6	<i>Ana Dobрева</i> (Bulgaria)	<b>The impact of soil herbicides on the yield and quality of lavender (<i>Lavandula angustifolia</i> Mill.) essential oil</b>
PP7	<i>Alexandra Machado</i> (Portugal)	<b>Volatiles characterization of different commercial honey types from the Azores (Portugal)</b>
PP8	<i>Jelena Aksić</i> (Serbia)	<b>New neryl esters from <i>Helichrysum italicum</i> essential oil</b>
PP9	<i>Jelena Aksić</i> (Serbia)	<b>Antimicrobial and anti-inflammatory potential of different immortelle essential-oil chemotypes</b>
PP10	<i>Suzan Kelly Bertolucci</i> (Brazil)	<b>Effect of macro- and micro-element-deficiency on growth and essential-oil composition of <i>Mentha arvensis</i> L. cultivated in solution</b>
PP11	<i>Paulo R. Moreno</i> (Brazil)	<b>Chemical composition and antimicrobial properties of the essential oils of two <i>Guadua</i> Kunth species (Poaceae-Bambusoideae)</b>
PP12	<i>Eisuke Kuraya</i> (Japan)	<b>Chemical investigation of the volatile compounds of <i>Alpinia zerumbet</i> leaves using DH-TD-GC/MS</b>
PP13	<i>Marcia Ortiz M. Marques</i> (Brazil)	<b>Composition and antimicrobial activity of the essential oils from a wide range of species from the Atlantic Rainforest in Brazil</b>

## PP7. Volatiles characterization of different commercial honey types from the Azores (Portugal)

Alexandra M. Machado<sup>1\*</sup>, M. Graça Miguel<sup>2</sup>, Miguel Vilas-Boas<sup>3</sup>,  
A. Cristina Figueiredo<sup>1</sup>

*Keywords:* honey, Azores, volatiles, *Pittosporum*

Honey and beekeeping products are usually consumed due to their nutritional and therapeutic properties, being also used in fragrances or cosmetics [1]. The Azores have a specific endemic flora as well as climate and soil conditions that allow the production of a unique honey classified as Protected Designation of Origin (PDO), with multifloral or *Pittosporum undulatum* Vent. (“incenso”) botanical origin [2]. As part of a research program aiming to evaluate the existence of specific honey volatile markers, this work reports the volatile profile of eight commercial honeys from the Azores (São Miguel, Santa Maria, Terceira and Pico). The volatiles were isolated by hydrodistillation for 1 h and analysed by gas chromatography and gas chromatography-mass spectrometry. The acyclic hydrocarbons *n*-nonadecane, *n*-heneicosane, *n*-tricosane, *n*-pentacosane, *n*-heptacosane and *n*-nonacosane dominated in all samples. Saturated fatty acids were also identified, namely decanoic and hexadecanoic acids. 2-Furfural, benzaldehyde, phenylacetaldehyde, phenylethyl alcohol, limonene and oxygen-containing terpenes, *cis*- and *trans*-linalool oxides, linalool,  $\alpha$ -terpineol and  $\alpha$ -,  $\beta$ - and  $\gamma$ -eudesmol, were detected in lower amounts. Although no previous studies described the volatiles of *Pittosporum* flowers from the Azores, a comparison with the volatiles isolated from the mainland *Pittosporum* flowers [3] showed that limonene, linalool,  $\alpha$ -terpineol and  $\alpha$ -eudesmol were present both in the Azorean honey samples (0.05-0.5%) and in the mainland flowers (0.05-2.2%). Further studies will aim at evaluating both the volatiles of honey from the main botanical origin, and well as the honey’s biological properties.

### References:

- [1] Oršolić, N., 2009. J. ApiPro. ApiMed. Sci. 1, 93–103.
- [2] Soares, S. et al., 2017. Compr. Rev. Food Sci. F. 16, 1072–1100.
- [3] Ferreira, N.J. et al., 2007. Flavour Frag. J. 22, 1–9.

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<sup>1</sup>Centro de Estudos do Ambiente e do Mar (CESAM Lisboa), Faculdade de Ciências da Universidade de Lisboa, Centro de Biotecnologia Vegetal (CBV), DBV, C2, Piso 1, Campo Grande, 1749-016 Lisboa, Portugal;

<sup>2</sup>Universidade do Algarve, Faculdade de Ciências e Tecnologia, MeditBio, Campus de Gambelas 8005-139 Faro, Portugal; <sup>3</sup>CIMO, Centro de Investigação de Montanha, Escola Superior Agrária, Instituto Politécnico de Bragança, Campus de Santa Apolónia, 5300-253 Bragança, Portugal.

\*Corresponding author: [ialexam@gmail.com](mailto:ialexam@gmail.com)