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

Alexandra M. Machado[1]*, M. Graça Miguel[2], Miguel Vilas-Boas[3], A. Cristina Figueiredo[1]

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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, α-terpineol and α-, β- and γ-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, α-terpineol and α-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.

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[1]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; [2]Universidade do Algarve, Faculdade de Ciências e Tecnologia, MeditBio, Campus de Gambelas 8005-139 Faro, Portugal; [3]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