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Área: PN

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Chemical analysis by UPLC-DAD-qTOF-MS/MS of the honeys of stingless bee *Melipona mandacaia* (Mandaçaia)

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Palavras Chave: Honey, Native bee, Phenolics, Flavonoids.

Highlights

Chemical composition of honey of stingless bee *Melipona mandacaia* (jandaira)

Presence of 53 phenolics were detected by UPLC-DAD-qTOF-MS/MS

Flavone and flavonol aglycones in *Melipona mandacaia* honeys

Resumo/Abstract

The stingless bee *Melipona mandacaia* popularly known as mandacaia is endemic to the Caatinga biome, being found in the region of Vale do São Francisco. It is a very important bee for meliponiculture in the municipalities of Petrolina (PE) and Juazeiro (BA), where they are used for honey production. Due to its importance and endemism, the mandacaia has been the subject of research, mainly due to the fact that there is little information about the species, together with the great demand for the rational creation and commercialization of its products. Profile of compounds by Ultra-Performance Liquid Chromatography coupled with a Diode Array Detector and quadrupole Time of Flight Mass Spectrometry (UPLC-DAD-qTOF-MS/MS) of sixteen *Melipona mandacaia* honeys from semiarid region of the Northeast of Brazil are presented. The melissopalynological analysis showed one principal pollen types of *Mimosa tenuiflora* (jurema preta). Mandaçaia monofloral honeys have similar characteristic profile of phenolic compounds. Fifty-three compounds were identified, mainly phenolic derivatives. Forty aglycone flavonoids: 26 flavones/flavonols and 14 flavanones/flavanonols.

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