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PP49. Scents from the Brazilian Cerrado: The essential oil from *Siparuna brasiliensis* (Siparunaceae)

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Cerrado is a term used to describe a savannah-like vegetation, occurring in Central Brazil. It is considered one of the 25 most important biodiversity hotspots in the world and has numerous herbs, including several aromatic plant families, many of which have never been subjected to chemical study [1]. Siparuna brasiliensis (Spreng.) A. DC. (family Siparunaceae) is an endemic Brazilian species, occurring in both the Cerrado and the Atlantic Forest [2]. Differently from other Siparuna species, very few chemical data are available about S. brasiliensis, and none so far regarding its essential oil. During a systematic investigation on the Cerrado flora, S. brasiliensis (CEN herbarium voucher 88294) was sampled in Brasilia, Brazil, and the essential oil obtained by hydrodistillation. According to Brazilian law, collection and access were authorized by the Ministry of Environment (process IBAMA 02001.003166/2013-26). The oil was analyzed by GC-FID and GC-MS on Agilent 7890A and 5975C systems, both with HP-5MS fused silica capillary columns (30 m x 0.25 mm x 0.25 µm). Oil components were identified by comparison of both mass spectra and linear retention indices with spectral libraries and literature. Oil yield was 0.7%. Only 11 compounds were detected, all but one identified by mass spectra and retention indices. Most of the constituents were closely related sesquiterpenes, with gurjunane and guaiane skeletons. The major compound was cyclocolorenone (75.5%). Other components present were 11-hydroxy-3,5-guaiadiene (tentative identification), 2-tridecanone (3.6%), α-cadinol (3.4%) and viridiflorol (3.4%).

References:

[1] Myers, N. et al., 2000. Nature 403, 853–858.

[2] Siparunaceae in Flora do Brasil 2020 em construção. Botanical Garden of Rio de Janeiro. In: http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB14545. Accessed on 28th May, 2018.

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