

Scents from Brazilian Cerrado: The essential oil from the leaves of *Pseudobrickellia brasiliensis* (Asteraceae) from Serra Dourada, Goiás

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Cerrado stands out among the biomes found in Brazil due to its rich biodiversity, great endemism occurrence and high anthropic pressure. Therefore, it is listed as a biodiversity hotspot (1). Located in Brazil's Midwest and occupying 21% of the national territory, it remains an area few studied so far (2). The AROCER project is an initiative for the prospection of aromatic plants from the Cerrado targeted to the development of income generation for the local population and sustainable cultivation practices. *Pseudobrickellia brasiliensis* (Spreng.) R.M.King & H.Rob., family Asteraceae, popularly known as arnica, is an endemic species from the Amazonia and Cerrado biome, in the last one found in rupestrian fields (3). Samples were collected in Serra Dourada State Park, Goiás. The essential oil was distilled in a Clevenger-type apparatus and analyzed by GC-FID and GC-MS in Agilent 6890N and 5973N systems, both with HP-5MS fused silica capillary columns (30 m x 0.25 mm x 0.25 µm). Hydrogen was used as carrier gas for GC-FID and helium for GC-MS, both with a flow rate of 1.0 mL/minute. Oven temperature was raised from 60 to 240°C at 3°C/minute. Mass detector was operated in electronic ionization mode at 70 eV. Quantitative data were obtained from the FID signal corrected with response factors and with area normalization using ethyl octanoate as internal standard. Oil components were identified by comparison of both mass spectra and linear retention indices with spectral library and literature. The oil yield was 0.2%, and the major components found were α-pinene (43.2%), α-thujene (21.8%), β-pinene (11.8%) and sabinene (6.5%), all of them, monoterpenes. These results are quite different from a previous report of our group on the essential oil composition of another sample of *P. brasiliensis* collected in a different geographical area (Araçuaí, Minas Gerais State), in which the major components identified were terpinene derivatives, namely terpinen-4-ol (38.6%), γ-terpinene (19.5%), α-terpinene (7.8%) and α-terpineol (4.5%) (4).

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