

Scents from Brazilian Cerrado: The essential oil from the leaves of *Protium ovatum* (Burseraceae)

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Keywords: *Protium ovatum*, Burseraceae, essential oil, Brazilian Cerrado.

Cerrado stands out among the biomes found in Brazil due to its rich biodiversity, great endemism occurrence and high anthropic pressure, therefore being 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. *Protium ovatum*, family Burseraceae, is a native and endemic species from the Cerrado and Amazon areas (3). Leaves samples were collected in Terra Ronca State Park, São Domingos, 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 0.3% and the major components found were (*E*)-caryophyllene (26.0%), bicyclogermacrene (18.9%), δ-3-carene (11.7%), β-phellandrene (9.9%), spathulenol (9.9%) and caryophyllene oxide (5.1%). The oils from *Protium* exudates are usually rich in terpinene derivatives, like α and γ-terpinenes, terpinolene and cymenes (4). However, the oil from the leaves, as shown here, was characterized by sesquiterpene derivatives.

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Acknowledgements: Embrapa, CNPq, Givaudan.