



Chemical composition of the essential oil of *Varronia curassavica* Jacq. (Boraginaceae) from Instituto Vital Brazil Farm.

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Keywords: *Cordia verbenacea*, essential oil, medicinal plant.

Varronia curassavica Jacq. (Boraginaceae) is a shrub native to most of Brazil, abundant in open coastal areas and pastures. Known as “erva-baleeira”, it is used in folk medicine with anti-inflammatory, anti-arthritic and analgesic actions (1,2). The essential oil of its leaves has been scientifically validated for use as anti-inflammatory, alpha-humulene and beta-caryophyllene being identified as main active constituents (3). Clinical assessment of efficacy from *Varronia curassavica* Jacq. (syn. *Cordia verbenacea* DC) was performed with standardized extract containing 2.3-2.9% alpha-humulene (4). The aim of this study is to analyze the chemical composition of the essential oil of leaves from *Varronia curassavica* cultivated at the Instituto Vital Brazil farm (Fazenda Vital Brazil) localized in Cachoeiras de Macacu / RJ, in view of its medicinal use in horses employed in the production of hyperimmune serum. Fresh leaves of *Varronia curassavica* were collected in March and July 2015. A voucher specimen was deposited in the herbarium of the Federal University of Rio de Janeiro under register number 39924. The essential oil was extracted for 2 hours by hydro-distillation, using a Clevenger-type apparatus, and analyzed by GC-MS in an Agilent 6890N gas chromatograph coupled to an Agilent 5973N quadrupole mass selective detector (70 eV, m/z 50–700), with DB-5MS fused silica capillary column (30 m X 0.25 mm X 0.25 µm). Helium was used as carrier gas with a flow rate of 0.5 mL/minute. The injector temperature was maintained at 250°C. The oven temperature program was as follows: 70°C (5 min) to 300°C (10.5 min) at a rate of 4°C/min. Oil components were identified by comparison of mass spectra with spectral library and literature. The area percentage composition was obtained by peak area normalization. Oil yields were 0.15% and 0.17%, respectively. The GC-MS analysis revealed the presence of at least 27 components, among them the following constituents of interest: alpha-humulene (3.9% and 4.8%); beta-caryophyllene (16.3% and 16.5%); alpha-pinene (52.3% and 37.9%); alpha-santalene (3.0% and 10.6%). The results show that the essential oil analyzed in terms of its active components has a good potential for medicinal use.

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Acknowledgements: Antonio Siani and Leandro Rocha for the use of Clevenger apparatus.