Chemical composition of *Salvia aratocensis* essential oil and volatile fraction

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Salvia aratocensis is one of the 300 species that compose the *Salvia* genus. This plant is endemic to the Chicamocha Canyon, in Santander, Colombia. Some studies have reported positive results in the use of *S. aratocensis* in the treatment of different pathologies such as tuberculosis, Chagas disease and leishmaniosis (1). The plant material (COL. No. 517740, Colombian National Herbarium) was collected at the CENIVAM Agroindustrial Complex (Bucaramanga-Santander, Colombia). The essential oil was obtained from the aerial parts of the plant by microwave-assisted hydro-distillation (MWHD) using a Clevenger apparatus. The volatile fraction was sampled with dynamic headspace purge and trap in dichloromethane (P&T) and headspace solid-phase microextraction (HS-SPME). The latter was performed by exposing for 30 min a SPME fiber (coated with Carboxen/PDMS) to the headspace inside an amber vial (15 mL) that contained the plant material, at 60 °C. The chromatographic analyses were performed with an Agilent Technologies 6890 (Palo Alto, CA, USA) gas chromatograph coupled to an Agilent Technologies MSD 5973 mass selective detector. Fused-silica capillary columns DB-5MS (J&W Scientific, 60 m 0.25 mm ID X 0.25 μm d_f), and DB-WAX (J&W Scientific, 60 m X 0.25 mm ID X 0.25) were used. Helium was used as carrier gas. The GC oven temperature was programmed from 45 to 275 °C for the DB-5MS column, and from 45 to 230 °C for DB-WAX column. Quantification was performed with a gas chromatography with flame ionization detector and the same column types. Compound identification was based on the comparison of their mass spectra with those of databases (Adams, NITS, WILEY) and of linear retention indices with those reported in the scientific literature. The main components the *S. aratocensis* essential oil were: *epi*-α-cadinol (47.7 %), 1-*epi*-cubenol (22.7 %), and γ-cadinene (6.3 %). The analysis of the volatile fraction by P&T and SPME showed that the secondary metabolites present in greater proportion were: γ-cadinene (17.4 %); *epi*-α-cadinol (10.4 %) and 1,10-*di*-*epi*-cubenol (9.0 %).

1. Bueno, C.; Escobar, P.; Martínez, J.; Leal, S.; Stashenko, E. Nat. Prod. Comm., 2011, **6**, 1743-1748.

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