



HS-SPME/GC-MS study of the volatile fraction of *Posoqueria latifolia* (Rubiaceae) flowers

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Posoqueria latifolia, a tree no higher than 7 m, belongs to the Rubiaceae family, and is native of Central America and part of South America. Its flowers are white, elongated and with an intense overnight fragrance (1). The objective of this work was to study the chemical composition of the volatile fraction of *P. latifolia* flowers. The vegetal material was collected (N°512081 of the National Herbarium of Colombia) at the pilot agro-industrial complex of the National Research Center for Agro-industrialization of Tropical Aromatic and Medicinal Plants (CENIVAM), located on the main campus of Universidad Industrial de Santander (Bucaramanga, Colombia). Fresh *P. latifolia* flowers (2.4 g) were placed inside an amber vial, and allowed to reach thermal equilibrium (10 min) at 60 °C. The extraction was done by exposition of a solid-phase microextraction (SPME) fiber (coated with PDMS/DVB, PDMS or CAR/PDMS) during 30 min. The largest chromatographic area was obtained with the CAR/PDMS fiber. HS-SPME sampling was done in triplicate at different times of day (6:00 am; 12:00 m; 6:00 pm). Compound identification was based on data obtained with a GC 7890 (Agilent Technologies 6890N, Palo Alto, CA, EE.UU.) gas chromatograph equipped with a mass selective detector AT 5975C (electron impact ionization, 70 eV), split/splitless injector (split 30:1) and a data system MSD ChemStation, version G1701-DA, which included the ADAMS, NIST, and WILEY spectral libraries. A capillary column with polar stationary phase of poly(ethylene glycol) (DB-WAX, J&W Scientific) of 60 m X 0.25 mm (d.i.) X 0.25 µm (d_f) was used. The main compounds identified in the fragrance of *P. latifolia* flowers were: methyl salicylate (28 %), hexenyl acetate (18 %), *trans*-β-ocimene (17 %), benzyl acetate (5 %) and isoeugenol (2 %). The release of the main compound, methyl salicylate, was lower in the morning (21 %) than at night (28 %). It has been reported in field tests, traps baited with methyl salicylate were highly attractive to adult beetles *C. septempunctata* (2).

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