



Chemical composition of the essential oil of *Plectranthus amboinicus* (Lour.) Spreng. that grows in Santander (Colombia).

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Plectranthus genus belongs to the Lamiaceae family and is constituted by approximately 300 species that grow in Africa, Asia, America and Oceania. One out of five of them has an ethnobotanical use (1,2). *Plectranthus amboinicus* (Lour.) Spreng., also known as *Plectranthus aromaticus*, *Coleus amboinicus* or *Coleus aromaticus*, grows all across the intertropical region of the globe. It is used in traditional medicine to treat different pathologies, mostly infectious ones (3). This work focuses on determining the chemical composition of the essential oil (EO) of *P. amboinicus* (Santander, Colombia). The leaves and stems, were dried for 50 days; all the plant material was then reduced to a size of 2 mm. The EO was obtained by microwave-assisted hydrodistillation (MWHD). Dried material samples (100 g) were subjected to MWHD in 3 periods of 15 min with 5 min of resting time between each extraction. The EO was collected in the Dean-Stark trap of a Clevenger apparatus. Secondary metabolites analyses were carried out on an Agilent Technologies 6890 GC with a mass-selective detector 5973 (EI, 70 eV). DB-5 and DB-WAX (60m X 0.25mm, D.I. X 0.25 μ m, d_F) capillary columns were used. The injector port temperature was 250 °C, the split ratio used was 30:1. Oven temperature was programmed from 45 to 150 °C, at 4 °C min⁻¹, then to 250 °C (5 min), at °C min⁻¹, and finally 275 °C (15 min), at 10 °C min⁻¹. The relative amounts were established with GC/FID normalization. Analytes in the oil were identified using ADAMS, NIST and WILEY databases. MWHD yield was 0.18 %, and 28 compounds were identified. Carvacrol (69.8 %) was the main component, followed by *trans*- β -caryophyllene (9.3 %), *cis*- α -bergamotene (4.9 %) and caryophyllene oxide (2.2 %). These results differ from the ones reported by Saïd *et al.* (Comoros), who hydrodistilled a dried plant material and had a yield of 0.12 % and identified carvacrol (23.0 %), camphor (22.2 %), Δ -3-carene (15.0 %) and γ -terpinene (8.4 %) as abundant constituents in the EO. It is good to notice that both compositions have carvacrol as their major compound, which is a monoterpene known for its antimicrobial activity (4).

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