

**Chemical composition and antioxidant activity of essential oil from *Lippia thymoides* Mart. & Schauer (Verbenaceae).**

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Lippia thymoides Mart. & Schauer (Verbenaceae) is a shrub growing up to 2 m, erect, branched, with little and aromatic leaves. The species is native and endemic from Brazil and popularly known as “alecrim-do-mato” or “alecrim-do-campo”. In folk medicine, is used to treat injuries, fever, bronchitis, rheumatism, headaches, and weakness (1,2). In the present study, the specimen was collected in Abaetetuba (Pará State, Brazil) in February and September 2014. Aerial parts of *L. thymoides* were subjected to hydrodistillation in a Clevenger-type apparatus for 3 h. The oils were analyzed by GC/MS in instrument Thermo DSQII systems. The operating conditions were as follows: DB-5MS fused-silica capillary column (30 m X 0.25 mm X 0.25 μ m); programmed temperature: 60-250 °C (3 °C min⁻¹); injector temperature at 250 °C; carrier gas helium, adjusted to a linear velocity of 32 cm s⁻¹. Mass detector was operated in electronic ionization mode at 70 eV. The retention index was calculated for all the volatiles constituents using an *n*-alkane homologous series. Individual components were identified by comparison of both mass spectrum and retention index data with authentic compounds cited in the literature (3). The oil yields were 0.88 % (February) and 0.45 % (September). The main constituents were the oxygenated monoterpene thymol in February (75.7 %) and September (60.0 %), followed by thymol acetate (5.2 %, 5.9 %) and monoterpene hydrocarbons: *p*-cymene (6.4 %, 8.5 %) and γ -terpinene (4.9 %, 7.9 %), and sesquiterpene β -caryophyllene (2.9 %, 4.6 %), respectively. The antioxidant activity of the essential oils was evaluated by DPPH radical scavenging method. The oils did not showed statistical differences to Trolox Equivalent Antioxidant Capacity (TEAC) with average value of 150.2 \pm 3.9 mg ET g⁻¹. These results suggest that antioxidant activity do not have direct correlation with thymol concentration.

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