



## Composition and biological activity of the essential oil from leaves of *Plinia cerrocampaensis*, a new source of $\alpha$ -bisabolol

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### ABSTRACT

The essential oil from fresh leaves of *Plinia cerrocampaensis* Barrie (Myrtaceae), obtained by hydrodistillation, was analysed by GC–FID and GC–MS. Forty components, representing more than 91% of the oil, were identified. Oxygenated sesquiterpenes represented the main fraction with  $\alpha$ -bisabolol (42.8%) as the major constituent, making this plant a new and good source of this substance.

Biological activity of the essential oil was evaluated against several bacterial and fungal strains as well as larvae from *Aedes aegypti*. The highest activity was found against *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Microsporum gypseum*, *Trichophyton mentagrophytes* and *Trichophyton rubrum* with MIC values from 32 to 125  $\mu\text{g/ml}$ . The essential oil also showed potent inhibitory and bactericidal activities against three *H. pylori* strains, with MIC and MBC values of 62.5  $\mu\text{g/ml}$ , and caused 100% mortality of *A. aegypti* larvae at a concentration of 500  $\mu\text{g/ml}$ .