



## Antimicrobial activity of *Cordia verbenacea* essential oil against pathogenic bacteria

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Keywords: *Cordia verbenacea*, *Varronia curassavica*, essential oil, *Staphylococcus aureus*, *Escherichia coli*.

*Cordia verbenacea* is a plant native throughout most of Brazil mainly on the coast, also in common Atlantic rainforest. The medicinal activities of this plant are scientifically validated and assigned to its essential oil constituents. *Staphylococcus aureus* and *Escherichia coli* are bacterial pathogens causing foodborne illnesses and infections. Research of alternative methods to control pathogenic bacteria through essential oils has increased because the microorganism resistance prevention (1,2). This work aimed to evaluate the antimicrobial activity of the essential oil of *C. verbenacea* against Gram positive and gram negative pathogenic bacteria. *C. verbenacea* was cultivated according in a organic production system. Oils from the leaves were obtained by hydrodistillation using a Clevenger-type system and their minimal inhibitory concentrations (MIC) were determined by microdilution method (3). The antimicrobial activity from essential oil was tested against *S. aureus* (ATCC 6538), *E. coli* (ATCC 8739) in seven concentrations (4000, 2000, 1000, 500, 250, 125, 62.5 µg/mL). The experimental design had four replicates per treatment. The MIC of *C. verbenacea* essential oil for *S. aureus* was 4000 µg/mL and *E. coli* was not inhibited at the concentrations tested. According with Aligianis' classification (4) this essential oil showed low antibacterial activity against *S. aureus*.

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Acknowledgements: FAPEMIG and CNPq.