



CORYMBIA CITRIODORA ESSENTIAL OIL ANTIMICROBIAL ACTIVITY IN VITRO

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Abstract: *Medium to large evergreen Corymbia citriodora (Eucalyptus citriodora) trees have smooth, powdery bark that is light grey, cream, or pink in color. It produces an essential oil that can be used to treat a variety of ailments. The aim of the study was to determine the antimicrobial activity of Corymbia citriodora essential oil (CCEO) against ten microorganisms. Candida species were most sensitive against Corymbia citriodora essential oil.*

• Introduction

Corymbia citriodora essential oil (CCEO) is mainly extracted from the leaves. CCEOs and their major constituents exhibit antimicrobial activity against microorganisms. Our aim in this context is to investigate the potential use of CCEO as a natural antimicrobial agent.

• Material and method

CCEO was purchased from Hanus s.r.o. Company (Nitra, Slovakia). Four yeasts, three Gram-positive bacteria, three Gram-negative bacteria were used. Antimicrobial activity was tested with using disk diffusion method.

• Results and discussions

The best antibacterial activity of CCEO against yeasts was found against *C. tropicalis* (17.33±0.58 mm). CCEO was most effective against Gram-positive bacteria *M. luteus* (9.33±0.58 mm) and Gram-negative bacteria *E. coli* (12.67±0.58 mm). The findings from the disc diffusion technique used to assess the antifungal potential of CCEO are compiled in different study.

• Conclusions

CCEO has a sizable amount of activity against a variety of microorganisms, including human pathogens, bacteria that cause food poisoning and spoilage.

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