

Bioassay-guided isolation of the antimicrobial compounds of *Coleus amboinicus* Loureiro (Lamiaceae)

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ABSTRACT

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The essential oil of the aerial part of *Coleus amboinicus* showed antibacterial activity against *Bacillus subtilis* (gram +) and *Pseudomonas fluorescens* (gram -) and antifungal activity against *Cladosporium cucumerinum*. Bioassay-guided fractionation revealed that carvacrol and β -caryophyllene-4,5-oxide were the major contributors to the antimicrobial activity of the essential oil. The sesquiterpene α -humulene and monoterpenes α -pinene, α -terpinene and cymene present in significant amounts were inactive.

Keywords: *Coleus amboinicus*, essential oil, antibacterial, antifungal, carvacrol, β -caryophyllene-4,5-oxide