

Título: PHYTOCHEMICAL SCREENING AND EXTRACT OF Canelinha (*Ocotea pulchella* Mez.) (Nees & Mart) ANTIBACTERIAL ACTIVITY EVALUATION FRONT OF DIFFERENT PATHOGENIC STRAINS

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Resumo:

In recent years the bacterial resistance increase to known antimicrobial agents is a relevant problem in infection control, hence the search for alternatives to antimicrobial agents has become the subject of study of companies and researchers. Based on this context, the aim of this study was the phytochemical prospecting and evaluate the antibacterial activity of the ethyl acetate extract of canelinha (*Ocotea pulchella*) on strains *Staphylococcus aureus* (ATCC 25923), *Staphylococcus epidermidis* (ATCC 12228), *Enterococcus faecalis* (ATCC 19433), *Bacillus subtilis* (CCCD B005), *Escherichia coli* (ATCC 25922), *Klebsiella pneumoniae* (ATCC 13883), *Pseudomonas aeruginosa* (ATCC 27853) and *Proteus mirabilis* (ATCC 25933). To obtain the extract, the leaves of canelinha were dried at 40 °C and ground in a slicer. Added to the plant leaf powder to the ethyl acetate PA 1:10 (w / v). After, it was placed on a rotary shaker for 24 hours. Finally, the mix was centrifuged at 5000 rpm (revolutions per minute) for 15 minutes, sterile filtered and vacuum rote-evaporated to completely solvent removal. The extract was evaluated at concentrations between 200 mg/mL to 3,12mg/mL, using the broth microdilution test. The bacterial metabolism was observed with the naked eye using triphenyltetrazolium chloride (TTC) at 0.5%. It was observed that the microdilution broth was inhibiting and bactericidal effect on all microbial extract concentrations ranging from 100 to 12.5 mg/mL. The strain that showed the greatest susceptibility to extract was *K. pneumoniae*, showing inhibition at a concentration of 12.5 mg/mL and bactericide effect on concentration of 50 mg/mL. *O. pulchella* extract phytochemical screening met free steroids, triterpenoids, flavones, flavonoids and xanthones presence as secondary metabolites. It is concluded that in all tests was bacterial inhibition suggesting the *O. pulchella* leaves extract uses as an alternative product for the control of these pathogens in public health.

Palavras-chave: antimicrobial activity, phytochemical screening, *Ocotea pulchella*.

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