

ANTIMICROBIAL ACTIVITY OF *S. microglossa* AGAINST COMMONLY ISOLATED BACTERIAS IN DIABETIC FOOT WOUND

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Solidago microglossa is vegetable specie from Brazil and has in its composition secondary metabolites that are related to important biological activities. In addition, it has been popularly used as analgesic and healing, among other applications. *Diabetes mellitus* is a serious disease may be autoimmune or acquired, can be presented as a metabolic disorder, can lead to unintended consequences as extremely resistant infections in the presence of difficult to treat and heal wounds, generating the diabetic foot, which can lead to amputation due to tissue necrosis. Thus, the aim this study was to evaluate the activity of 70% ethanol extract *S. microglossa* against microorganisms commonly isolated of patients with diabetic foot wound. The 70% ethanol extract was obtained by percolation. The antimicrobial activity was evaluated against species of bacteria commonly isolated of diabetic foot wounds, *Staphylococcus aureus* (INCQS 00015), *Escherichia coli* (INCQS 00182) and *Pseudomonas aeruginosa* (INCQS 00026), using the method of diffusion in agar on concentrations of 5000 and 2500 µg/mL. It was observed that 70% ethanolic extract of *S. microglossa* was able to inhibit bacteria *E. coli* on the concentration of 5000 µg/mL. Concluded that are necessary studies that could evidence important biological actions related to the metabolites described in this species, contributing to the discovery of more effective therapeutic options for the treatment of infections in diabetic foot wounds a major public health problem.

Key words: *Solidago microglossa*; diabetic foot wound; antibacterial activity.