ASSESSMENT OF THE ANTIMICROBIAL EFFECT OF EXTRACT GLYCOLIC ALLAMANDA CATHARTICA L.

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Nowadays, the antimicrobial activity is one of the properties of medicinal plants most researched, since one of the major public health problems is the bacterial resistance to chemicals and antibiotic. The objective was to evaluate the antimicrobial liquid soap containing different concentrations of glycolic extract of Allamanda cathartica L. (GEAC) as active ingredient. This plant is found in the Atlantic forest in Brazil. The microbiological evaluation was performed by agar diffusion test against gram positive Staphylococcus aureus ATCC 6538 and Staphylococcus epidermidis ATCC 12228 and gram-negative Escherichia coli ATCC 11229, according to the methodology described by the Clinical and Laboratory Standard Institute (CLSI, 2003), with modifications. The samples were i) neutral liquid soap without addition of GEAC; ii) liquid soap containing 1%, 3% and 5% of GEAC; iii) GEAC pure and iv) liquid soap containing 1% of triclosan (5-chloro-2-(2,4-dichlorophenoxy)phenol), as positive control. S. epidermidis was resistant to all treatments, including the positive control. For E. coli no significant difference was observed (p<0.05) between the formulations containing GEAC and neutral soap. However, formulations containing GEAC on the concentrations of 3 % and 5 % were more effective (p<0.05) than neutral soap in the antimicrobial activity against S. aureus. The formulations containing GEAC on the concentrations of 3 % and 5 % were similar between themselves and to the positive. Thus, it is suggested that the use of liquid soap containing 3% GEAC, which is a natural product, can replace the formulation containing triclosan, regarding to antibacterial activity, in the cleaning and sanitizing procedure of hands for food handlers.