

ANTIFUNGAL ACTIVITY OF NATURAL COMPOUNDS TO *Candida* spp AND PROTEOMIC ANALYSIS OF THE CELL TARGET

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Human fungal infections have increased at an alarming rate in the last 20 years, mainly among immunocompromised individuals. There is a question for new generations of antifungal compounds due to certain limitations like side effects as toxicity and emergence of resistant strains. Based on the knowledge that plants develop their own defense against fungal pathogens, they appear as an interesting source for antifungal compounds. In this study, we evaluate the antifungal activity of plants from Brazilian Cerrado and Atlantic Forest against *Candida albicans* and *Candida krusei* and the Minimal Inhibitory Concentration (MIC) were determined by CLSI 2002. The cell target of both yeasts was investigated by proteomic analysis after treatment with these compounds and the licensed drugs. Some crude extract and fractions of the plants *Peperomia* sp and *Kielmeyera* sp that presented lower MIC value were selected. The protein extracts of both yeasts were obtained by De Groot et al., 2004 with modifications. Numerous spots were observed with 2D-electrophoresis technique before and after treatment with plant extracts. The identification of these proteins by MALDI-TOF-TOF is in progress. These preliminary results showed that some plant extracts presented good results to the important yeast with resistant profile to fluconazole.

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