

Effect of Common and Alternative Antimicrobial Solutions Yeasts Isolated from Uricultures of Patients Attended at University Hospital “Prof. Alberto Antunes” (AL)

¹ Padilha, I.G.; ¹ Pinto, L. S.; ² Lopez, A. M. Q.;
¹ FAMED/UFAL, igorpadilha@hotmail.com; larilivro@yahoo.com.br ; ² IQB/UFAL, amql@qui.ufal.br; UFAL- BR 104 N Km 97, Maceió-AL, Brazil CEP 57072-970.

Bee pollen is a very nutrient food, but its therapeutic actions in several biological systems are also known, mainly because of its high content of antioxidant compounds. Furthermore, yeasts are responsible for many infections in hospital environments, and their lost of sensibility to antifungal drugs (clinical or in vitro), due to a previous contact with them, has been described. The purpose of this work was evaluate the probable antifungal activity of hidroethanolic (70%) extracts of pollen (EEP) of one Africanized (*Apis mellifera*) and two native (*Plebeia droriana*, *Mellipona scutellaris*) bees of the State of Alagoas (EEPAm, EEPPd and EEPMs) and compared it to that of conventional antifungal drugs, aiming their use in therapeutic creams. Thus, different yeast isolates of uricultures from patients attended at the University Hospital "Prof. A. Antunes (AL), from July 2008 to January 2009, were identified according to their morphological and biochemical characters, using tests such as the enzymatic system API-Candida (BioMerieux-France). The in vitro sensibility of these yeasts (Agar-Sabouraud, 10^6 cells.mL⁻¹, pour plate) against Fluconazole, Nystatin, Miconazole, EEPAm, EEPPd, EEPMs and distilled water was also evaluated. For this, the distinct solutions (100µL) were deposited in holes (\approx 6.8 mm) of the inoculated medium where the agar had been removed, and the plates incubated (24 h at 6 ± 2 °C and 24 h at 33 ± 2 °C) before the evaluation according to the criteria of the Clinical and Laboratory Standards Institute. The randomized experimental design was performed with 3 repetitions [3 replicates for each combination of yeast isolate (3) and tested substance (7)]. The yeasts were identified as *Candida* spp and the commercial antifungal drugs inhibited their growth, being Fluconazole the more efficient one, but considering the studied concentration of the EEPs (50 mg pólen.mL⁻¹), no significant action against the studied yeasts was observed.

Palavras Chaves: *Candida*, extracts of pollen, tests of sensibility
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