Title: YEASTS RECOVERED FROM THE MICROBIOTA OF SCARLET IBISES (Eudocimus ruber) MAINTAINED IN CAPTIVITY AT PARQUE MANGAL DAS GARÇAS IN BELÉM, PARÁ, BRAZIL.

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Abstract:

There are some reports in the literature describing the importance of birds as hosts of potentially zoonotic yeasts. This study investigated the yeast microbiota of scarlet ibises (Eudocimus ruber) and the environment in which they live, as an attempt to elucidate the potential risks for human and animal health, since there is a lack of studies on the microorganisms associated with this species. Samples were collected at Parque Mangal das Garças, in the city of Belém, Pará, Brazil, from the cloaca of 10 scarlet ibises with sterile swabs, 10 stool samples collected from the enclosures and 10 samples of plant material from the environment. The samples were suspended in sterile saline solution (0.9% NaCl), homogenized by vortex for three minutes and allowed to rest for 30 minutes, at 25°C. Aliquot of 100 µL of supernatant from each sample was cultivated in duplicate onto Petri dishes containing Sabouraud agar with chloramphenicol and Niger seed agar. The colonies of yeast were stained with lactophenol cotton blue and viewed under optical microscope. Initially, they were seeded on chromogenic medium for yeasts, to obtain pure colonies. Later, species were identified through micromorphological, biochemical and nutritional tests. Of the 30 samples collected, 17 samples were positive for yeasts, of which eight were stool samples, two cloacal swabs and 7 plant samples. A total of 40 isolates characteristics of yeast were recovered, of which 31 belong to the Candida genus (15 C. catenulata, 13 C. famata, 02 C. intermedia, 01 C. lusitaniae); three Rhodotorula spp. and six Trichosporon spp. In conclusion, potentially zoonotic yeasts of the genera Candida spp., Trichosporon spp. and Rhodotorula spp. are associated with the microbiota of the scarlet ibis and the environment where these birds live.

Keywords: Eudocimus ruber. Guarás. Yeast. Zoonosis.

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