

TITLE: ISOLATION OF *Cryptococcus* SPECIES FROM BIRDS EXCRETAS AND TREES NEAR A UNIVERSITY HOSPITAL

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ABSTRACT:

The yeasts of the genus *Cryptococcus* are cosmopolitan, and two species, *Cryptococcus neoformans* and *C. gattii*, are responsible for triggering cryptococcosis, an opportunistic mycosis that affects immunocompromised patients and sometimes immunocompetent adults, mainly causing meningoencephalitis. Other species may eventually be pathogens, such as *C. albidus* and *C. laurentii*, are often isolated from trees and excretas in the environment, and also implicated in human and animal infections. It is considered a public health problem, being one of the defining diseases in individuals with AIDS. The agent can be acquired by the patient in contact with the environment. The aims were to verify the occurrence of *Cryptococcus* species in dry excreta of birds and hollows of trees and decomposing wood, located close to Hospital de Clínicas de Uberlândia. In the period from August to December 2016, 81 different samples were collected (40 of bird excrement and 46 of hollows of trees and decomposing wood). The collection was done by scraping with sterilized metal spatula in an amount of 2 to 5 grams. The samples were added saline solution with chloramphenicol, vortex homogenized, seeded on Niger agar and on Sabouraud Dextrose agar. They were incubated at 30°C with daily observations up to seven days. The identification of the microorganism was carried out through phenotypic and biochemical tests. Of the 40 excreta samples, 14 (35%) were positive for the genus *Cryptococcus*. Of these, one (7.1%) was identified as *C. neoformans* / *gattii* complex, five (35.7%) *C. laurentii*, two (14.3%) *C. albidus*, two (14.3%) *C. terreus* and four (28.6%) *Cryptococcus* sp. In relation to 41 samples of trees, 12 (29.3%) were positive for the genus of study, and 11 (91.6%) identified as *C. laurentii* and one (8.4%) samples *Cryptococcus* sp. In the samples included in the study, only one strain of the *C. neoformans* / *gattii* complex was isolated. Besides other species that are part of a common niche for pathogenic species were isolated, mainly *C. laurentii*, which was the most frequent species.

Keywords: *Cryptococcus* species; Cryptococcosis; Environmental Microbiology

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