

TITLE: OCCURRENCE OF CRYPTOCOCCUS COMPLEX IN CONDITIONING AIR FILTER OF TRAFFIC CARS IN CITIES CUIABÁ AND VÁRZEA GRANDE/MT - BRAZIL

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ABSTRACT:

Cryptococcus spp are yeast fungi encapsulated with cosmopolitan distribution causing Cryptococcosis. In the environment, the fungus is found mainly in substrates of animal and vegetal origin. Human infection occurs through the inhalation of sexually propagated propagules present in the environment. We initially selected 50 air conditioning filters for automobiles in the cities of Cuiabá and Várzea Grande. With the aid of swab, the internal dust of these filters were collected and diluted in saline solution and seeded in Sabouraud agar plus chloramphenicol and after being cultured at 37° C for 5-7 days. After growth of the colonies were performed phenotypic tests agar urea, china ink, Niger agar and CGB medium. Of the 70 initial automobile filter samples, 6 filters were positive (8.6%) with 6 isolated colonies. The confirmation of the species by phenotypic methods, proved to be the colonies belonging to the *Cryptococcus* complex, two of them (F15), of the same filter, showed positivity in the Chinese ink, urea and phenoloxidase positive activity and the other four (F07, F22, F27 and F44) confirmed by urea and techniques from Chinese ink. The CGB test was positive for the two isolates of the filter (F15), with the change of medium to cobalt blue, possibly indicating the species *Cryptococcus gatti*. Molecular identification tests will be performed in the future to confirm the species. The high diversity of yeasts of the genus *Cryptococcus* spp; isolated from several environmental sources suggests the possibility of immunocompromised and even healthy individuals coming into contact with multiple sources of inoculation throughout their lives. Extensive knowledge and surveillance of reservoirs and sources of infection are important; these parameters help and provide epidemiological data for the implementation of an effective prevention and therapy

Keywords: Car filters, internal dust, *Cryptococcus* complex, yeasts