Título: MICROBIOLOGICAL EVALUATION OF AIR FROM THE ENVIRONMENTS OF THE ACADEMIC CENTER VICTORY (CAV) UFPE-PE

Autores Sobral, L.V. [1], Melo, K.N.[1], SILVA,S.F[1], Oliveira, I.S. [1]

Instituição [1] UFPE/CAV - Universidade Federal de Pernambuco/Centro Acadêmico de Vitória do Santo Antão (Rua do Alto do Reservatório, S/N – Bela Vista – CEP 55608-280 – Vitória de Santo Antão – PE)

Resumo:

Airborne fungi are found in vegetative form, being the most abundant in nature and filamentous constituting the main contaminants in the air of air-conditioned environments: hospitals, laboratories, classrooms, and can promote and trigger allergic processes, mucous and skin irritation, and infections resulting from the inhalation of the spores present in the air. Most fungal infections are acquired through the air and the aggressiveness of the species depends, in large part, their size, since the particles with more than 18 µm in diameter are retained in the upper respiratory tract, while less than 5 µm particles can reach the bronchial tubes. The national health surveillance agency (ANVISA) determines the technical reference standards of fungi in air ($\leq$ 750 UFCm^3 and $\leq$ 1.5 for relationship between the internal and external air), absence of toxigenic fungi, cleaning and maintenance of air conditioning systems, indoor air quality and monitoring to ensure the health and safety of individuals who attend public places and collectives with air-conditioned environments. Human activities and building maintenance exercise a key role in air quality indoors. The present study aimed to assess the microbiological quality of air of the Academic Center Victoria (CAV), Federal University of Pernambuco – PE. For research, collections were carried out 85 air-conditioned environments through the technique of passive sedimentation for 15 minutes, using the culture media MEA and PCA for count of fungal colonies and AFPA (detection of fungi aflatoxigenic). Have been assessed laboratories, classrooms, administrative sectors. According to the evaluation, it was observed that 100% of the environments examined met according to the applicable regulatory standard by ANVISA for air quality of air-conditioned environments with average 41 CFU colnies. No toxigenic fungus was observed in any environment. Fungal Diversity was observed in the all environment. Fungi present in environments that presented more diversity of fungal colonies were peaked for biotechnological studies. 98 separate colonies were obtained between filamentous fungi and yeasts, concluding that although the introduced fungal species biodiversity CAV, air-conditioned environments meet the ANVISA legislation.

Palavras-chaves: microbiology, air, fungi, toxins

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