

Title: MELANIZED FUNGI FROM ENVIRONMENTAL SAMPLES OF AMAZONAS RURAL AREAS

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The melanized fungi are considered saprophytic and are widely spread in nature, being commonly related to clinical infections as the chromoblastomycosis, phaeohyphomycosis and mycetoma, at last years. These fungi have worldwide distribution, being mainly found in tropical and subtropical climate areas, as Amazon region, a favorable environment for microorganism proliferation. There are few reports of studies about melanized fungi and little is known about the distribution of these fungi in the Amazon region. Thus, the present study aimed to identify the presence of melanized fungi in different environmental samples from rural areas located in the Amazonas: Rio Pardo locality, municipality of Presidente Figueiredo; Lago do Limão and Serra Baixa, in the municipality of Iranduba. Were collected 85 samples of soil (peridomicile, forest and farming) and 40 samples of live plants parts (thorns, leaves and branches), these last using as criteria the presence of dark pigments. Isolation of fungi was carried out by mineral oil flotation technique and the isolates were submitted to morphological analysis and molecular analysis by amplification of the ITS region using the primers V9G and LS266, and sequencing with the primers ITS1 and ITS4. 140 fungi were isolated with dark colonies, features of melanized fungi, of these, 26 were from soil samples (14 from peridomicile, 7 from forest and 5 from cultivation) and 114 were from parts of live plants, being 87 from thorns, 20 from leaves and 7 from branches. Through the morphological and molecular analyzes, were identified melanized fungi of the genus *Cladosporium* from forest soil samples and the genus *Cladophialophora* also found in soil peridomicile samples and, the genus *Exophiala* observed in forest soil sample and plant thorns. These results demonstrate the presence of melanized fungi of distinct genus in different types of environmental samples from Amazonas rural areas.

Keywords: Melanized fungi, identification, environment

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