Title: OCCURRENCE ASSESSMENT OF DERMATOPHYTES FUNGI IN A RURAL COMMUNITY IN AMAZONAS

Authors: Tavares, R.M.^{1,2}, Alves, G.S.B.³, Grisolia, M.E.¹, Jackisch-Matsuura, A.B.¹

Institution: ¹ILMD - Instituto Leônidas e Maria Deane (Rua Teresina, 476, Adrianópolis, Manaus-AM), ²FCF/UFAM – Faculdade de Ciências Farmacêuticas da Universidade Federal do Amazonas (Av. General Rodrigo Octávio, 6200 - Coroado I, Manaus - AM), ³PPGSSEA - Programa de Pós-Graduação em Saúde, Sociedade e Endemias na Amazônia – UFAM/FIOCRUZ (Rua Teresina, 476, Adrianópolis, Manaus-AM),

Abstract:

Dermatophytes are a group of filamentous fungi that have widely geographic distribution, however, some species can prevail in specific geographic regions. They are morphologically and physiologically related causing infections named dermatophytosis popularly known as ringworm. They have the capacity to colonize keratinized structures, due to his keratinophilic and keratinolytic features. Dermatophytes can be classified according to their habitat in geophilic, zoophilic and anthropophilic. The geophilic dermatophytes exist as saprobes in the soil and have the ability to successfully colonize competitive keratinous substrates and some have the ability to cause dermatophytosis in some animal species, including the man. The "Comunidade São Sebastião da Serra Baixa" is located in rural county of Iranduba (Metropolitan Region of Manaus) and gives access to a number of beaches, including the Acutuba beach, and because of the construction of the bridge over the Rio Negro, the community began to receive a lot of visitors, especially on weekends. A study was conducted in "Comunidade São Sebastião da Serra Baixa", in order to identify the presence of dermatophyte fungi in peridomicile areas, 86 samples were collected, of which 51 were community samples and 35 samples from rural areas (farmlike), all collected in peridomicile area. Dermatophytes were isolated from soil using the Vanbreuseghem hair bait technique. The community samples 98% (n = 50/51) were positive and the farmlike areas 82.9% (n = 29/35) samples were positive for the growth of dermatophyte on hair bait. Thus, the community presented high positivity in both studied areas. In the community's headquarters, only 1 sample (collected in the school that serves the community) was negative, which may be related to the controlled environment, with presence of walls and gates that prevent the transit of animals in the area. This situation is not generally observed in the community, where infrastructure and sanitation conditions are poor.

Keywords: Dermatophytes, Soils, Amazonas

Financial support: PROEP 2014 – FIOCRUZ/FAPEAM