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Fungal diversity in soil samples from a Mexican region with endemic dermatomycoses

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ABSTRACT

Forty soil samples were collected from four rural communities in the Municipality of Huauchinango (Puebla, Mexico), a region with endemic dermatomycoses. Classical and molecular approaches allowed the identification of 30 different species, including several agents of superficial, subcutaneous and opportunistic mycoses. The most prevalent pathogenic agents identified by micro-morphological characteristics were: *Trichophyton mentagrophytes* (12.5%), *T. rubrum* (7.5%), and *Aspergillus flavus* (7.5%). A lower number of isolates was obtained in soils having acidic pH (5.19). Fungal diversity of *Ascomycetes* was also found in the studied area by sequence analysis of the ITS1-5.8S-ITS2 rDNA region. Our results showed a high prevalence of pathogenic and potential agents of mycoses, as well as the importance of molecular tools to identify microbial populations in soil.

Key words: Diversity, fungi, mycosis, phylogeny, soil.

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