Prevalence of fungi in indoor air with reference to gymnasiums with swimming pools

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ABSTRACT
Fungal contamination of air in 10 gymnasiums with swimming pools was monitored. Fifty air samples of 200 L each were collected, using a Millipore air tester, from the area surrounding the pool, in training studios, in showers and changing rooms for both sexes, and also, outside premises, since these are the places regarded as reference. Simultaneously, environmental parameters – temperature and humidity – were also monitored. Some 25 different species of fungi were identified. The six most commonly isolated genera were the following: Cladosporium sp. (36.6%), Penicillium sp. (19.0%), Aspergillus sp. (10.2%), Mucor sp. (7%), Phoma sp. and Chrysonilia sp. (3.3%). For yeasts, three different genera were identified, namely, Rhodotorula sp. (70%), Trichosporon mucoides and Cryptococcus uniguttulatus (10%).