



Preliminary survey of airborne fungal spores in urban Environment

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Owing to their ubiquitous presence in nature, fungal spores represent an inevitable allergen source and are included among the most important agents responsible for provoking allergic manifestations. There have been many investigations in various parts of the world to determine the presence and sources of allergenic fungal species and to evaluate their seasonal variations. The airspora concentrations of outdoor environments depend on numerous factor including: time of day, meteorological factors, seasonal climatic factors, type of vegetation and human activity. The airborne spores from Timisoara city were investigated in 2006. Atmospheric samplings were conducted using Lanzoni VPPS trap. We have identified the following types of fungal spore with allergenic effect: *Cladosporium*, *Alternaria*, *Epicoccum*, *Helminthosporium*, *Stemphylium*, *Curvularia* and *Fusarium/Leptosphaeria*. The study showed that the most prevalent (major components) fungal spores in the air of Timisoara were those of the genera *Alternaria* spp. and *Cladosporium* spp. 57 spores with sporadic appearances were minor components of airplankton. Further research will focus on producing a more detailed calendar showing the incidence and types of fungal spore genera present in the Timisoara atmosphere, and to the level of mould spores in outdoor environments. The seasonal patterns of spore types follow the life cycle of the local vegetation. The present study will contribute to our knowledge of airborne spores in România. Such studies are useful for clinicians and their patients who are allergic to fungal spores.