



Studiul bioparticulelor aeropurtate în Timișoara – România

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The presence and concentration of airpollen and airspores, in outdoor and indoor environment, have been the subject of numerous studies in various geographical regions and in various contexts, including those of agrobiology and medicine. More recently, airborne fungal spores have been investigated with reference to the conservation of works of art. The aim of this paper is to report the spectrum and concentrations of airborne bio-particles in Timișoara during a two months (2005) as a preliminary study to future research.

Airborne pollen and spores were sampled continuously with a Hirst-type trap located on the roof of a building of the University of West. The volumetric method was used, and easily identifiable pollen types were sampled: *Artemisia*, *Ambrosia*, *Chenopodiaceae/Amaranthaceae*, *Pinaceae*, *Plantago*, *Poaceae*, *Rumex*, *Tilia*, *Urtica*. The best-represented pollen type through the entire period was *Poaceae*. Number of days when daily grass pollen concentration was over the threshold value (30 PG/m³) for clinical symptoms for the majority of sensitized patients is 23. Our results show the presence of a large number of fungal spore types, a total of 35. Amongst the fungal spores group, *Cladosporium* and *Alternaria* constituted the dominant components in the airspora. The maximum amount daily concentration of *Cladosporium* spore type occurred on July 5 when 2220 airspores/m³air were collected. The present study detected remarkable diversity in spore types and showed abundant mycoflora in the Timișoara atmosphere.