

Madrid-Malaga interlaboratory experience

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Purpose: aerobiology is essential for assessing the impacts of biological particles on the environment and human health. However, there's a notable disparity in attention between airborne fungal spores and pollen grains. This communication aims to establish basic guidelines for initiating airborne fungal spore monitoring in a new sampling location, using the collaboration between the Aerobiology groups of the Faculty of Pharmacy of the Complutense University of Madrid and the Faculty of Sciences of the University of Malaga as an example.

Characteristics: the interdisciplinary collaboration between the Aerobiology groups of two universities has facilitated the beginning of spore monitoring in Malaga. Basic guidelines for starting airborne fungal spore monitoring are outlined, including compiling bibliographic material, mounting reference samples, and analyzing samples obtained from various environmental conditions (indoors and outdoors) to identify potential differences in spore diversity.

Results: the collaboration between experts in different areas within the Spanish Aerobiology Network has enabled the collection of data on the presence and distribution of various airborne spore types in Malaga. This collaboration has led to an increase in available information regarding fungal spore monitoring in the region.

Conclusions: understanding the distribution and impact of fungal spores is crucial for developing disease prevention and mitigation strategies related to fungal aero-allergen exposure. Additionally, this new information could contribute to assessing air quality, supporting urban planning management to minimize health risks, and monitoring potential phytopathogens affecting local plant populations.

Key words: fungal spores; interlaboratory; aerobiology; Madrid; Malaga