

July 05-07, 2018  
Vienna, AustriaAl-Nesf M et al., Insights Allergy Asthma Bronchitis 2018, Volume: 4  
DOI: 10.21767/2471-304X-C1-003

## POLLEN ATLAS TO INVESTIGATE THE LOCAL FLORA IN QATAR

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**A**ll Palynological applications and researches related to pollen require the definition of pollens and establishment of an illustrated Pollen Atlas. Pollen Atlas is a reference resource that records the specimens of many species collected from local flora. It is used by researchers involved in agriculture, forensic, allergy, phenology and biological specialties. Furthermore, the atlas will help plant taxonomist to solve the problems of distinguishing between the morphologically similar plants and will improve our understanding of the evolution of Arabian plant communities and environments. We initiated a pioneer project on Aerobiological studies in Qatar and Sharjah: toward the establishment of a network for pollen analysis and allergenicity; collaborative work between Hamad Medical Corporation (Qatar), and University of Malaga (Spain) teams working on the local flora of Qatar. The Project aims to develop innovative solutions for the sustainable management for the endemic flora in the Arabian Peninsula, through the preparation of an illustrated Atlas with the most common pollen types in the atmosphere of Qatar (Doha and Al-Khor). Pollen obtained from flowering samples of native, ornamental, crop and horticultural plants were collected from different parts in Qatar from January to September 2017. A total of 277 species were collected. Reference slides of pollens grains were prepared using each of blooming plants. Pollen grains were mounted in glycerine jelly solution. Pollen grains are represented by family or genus level. For each species, a high-quality image was taken for the pollens collected from the flowering plants with the magnification of 400 X. Differences in species, abundance and distribution, were observed. This tool is a rapid method to identify and determine pollen season overlap where species and genera cannot be distinguished by microscopy. This is the first step, but we expect to expand the process for most of the flora of Qatar.

### Biography

Maryam Ali Al-Nesf Al-Mansouri has completed her MD from Sultan Qaboos University, Sultanate of Oman in 1999 and Arab Board of Medical Specialization in 2005 in Medicine. She finished speciality training in Pulmonary Medicine and in the Allergy and Clinical Immunology fellowships from 2005-2009. She is the Head of Allergy and Immunology Section, Hamad Medical Corporation, Qatar since 2016. Currently, she is advancing her academic career by studying the degree of Cellular and Molecular Medicine (MSc) (R) in the Faculty of Biomedical Science at the University of Bristol, UK. She has published more than six papers in reputed journals and multiple abstracts.

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