

## 1 **The aeropalynology of the Sebkha of Oran, northwest Algeria**

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### 13 **ABSTRACT**

14 The airbourne pollen in Oran city and the Sebkha of Oran, northwest Algeria, was investigated.  
15 In particular, the seasonal distribution of pollen and pollen marker taxa at the Sebkha of Oran,  
16 were studied between 2004 and 2006 using the Cour method. A Cour pollen collecting device  
17 was installed at a meteorological station in Es Sénia airport, near Oran city. Non-arboreal (herb)  
18 pollen comprising Chenopodiaceae-Amaranthaceae, *Plantago*, Poaceae, Urticaceae, Asteraceae,  
19 Brassicaceae, Apiaceae and Polygonaceae (*Rumex*) dominate the assemblages and make up  
20 69.5% of the overall total. Arboreal pollen, from shrubs and trees (i.e. Oleaceae, Cupressaceae,  
21 *Quercus*, *Pinus*, *Eucalyptus*, *Casuarina*, *Pistacia*, *Arecaceae* and *Thymelaeaceae*) was recorded  
22 in substantially lower proportions (30.2%). Herb pollen is abundant in spring, less so in summer  
23 and is markedly sparser during autumn and winter. Arboreal pollen is also produced abundantly  
24 during spring. However, winter is significantly richer in pollen from trees and shrubs than  
25 throughout the summer and autumn. Most of the main pollen taxa markers at the Sebkha of  
26 Oran, i.e. Chenopodiaceae-Amaranthaceae, *Plantago*, *Oleaceae*, Poaceae, Cupressaceae and  
27 Urticaceae, exhibit spring pollination.

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29 **KEYWORDS** aeropalynology; Cour Method; pollen markers; seasonal distribution; Sebkha of  
30 Oran, northwest Algeria

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### 32 **1. Introduction**