

Palynological investigation to reconstruct environmental changes and human impact at Lake Volvi (Greece)

Maschi L.^{[1]*}, Masi A.^[1], Sadori L.^[1]

[1] Department of Environmental Biology, Sapienza University of Rome

*e-mail corresponding author: lucrezia.maschi@uniroma1.it

Keywords: Palynology, Lake Volvi, Climate changing, Balkans, Holocene

Abstract

Lake Volvi is the second largest lake of Greece, situated in the Chalkidiki peninsula, central Macedonia. The area inhabited since the Palaeolithic [1], shows a continuous human occupation in the last millennia and is in a key region for biodiversity [2]. The lake is also in a very strategic position for trading routes since the Bronze Age and particularly in Roman time when the road “Via Egnatia”, ran the northern shore of the lake [3]. For such reasons, Lake Volvi is a perfect case study for the analysis of the environmental and climatic changes that occurred in the Balkans and to investigate the development of past populations through time. This study intends to investigate this important environmental and cultural area highlighting human responses and resilience to climate changes detected through pollen analyses.

Palynology is a fundamental discipline in such studies: pollen data provide information on past flora and an estimation of the vegetation biomass. Plant biomass changes can be due to either human impact or climate changes. Understanding the causes of vegetal landscape changes is always complex and for this reason a multi-proxy approach is essential.

The preliminary results here presented focus on the high-resolution pollen and microcharcoal analyses performed on a sediment core extracted from the west bank of Lake Volvi. The results provide information on vegetational dynamics during the Holocene. Preliminary pollen results revealed a landscape characterised by arboreal vegetation with the dominance of Mediterranean and mesophilous taxa: *Quercus ilex* type, *Quercus robur* type, *Pinus* and *Ostrya/Carpinus orientalis*. A general and progressive anthropization trend of the vegetational landscape is observed since 700 yr BP with the contemporary presence of cereals, *Olea* and *Castanea*.

References

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Indicare di seguito se si preferisce presentare in forma:

- ☒ orale
- ☐ poster.