

ABSTRACT BOOK

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Preliminary palynological results from off-site cores at the Terramara Santa Rosa di Poviglio, N Italy (SUCCESSO-TERRA Project)

Eleonora Clò * ¹, Paola Torri ¹, Anna Maria Mercuri ¹, Guido S. Mariani ²,
Andrea Zerboni ², Mauro Cremaschi ²

¹ Laboratorio di Palinologia e Paleobotanica, Dipartimento di Scienze della Vita, Università degli Studi di Modena e Reggio Emilia – Modena, Italy

² Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano – Milano, Italy

The archaeological site "Terramara Santa Rosa di Poviglio" (1550–1170 BC) has been investigated for 35 years, under the direction of M. Cremaschi and M.A. Bernabò Brea. It is the key site of the national-funded SUCCESSO-TERRA Project (*Human societies, climate-environment changes and resource exploitation/sustainability in the Po Plain in the mid-Holocene: the Terramare culture*; PRIN-20158KBLNB; <https://www.successoterra.net>; Cremaschi et al. 2018). This interdisciplinary project focuses on the relationship between humans, climate, and environment during the trajectory of the Terramara culture. This society underwent a phase of intense development and demographic increase before it collapsed, after 3000 years, due to negative climate factors and the unsustainable exploitation of natural resources.

Three off-site cores were collected at different distances north of the archaeological site "Terramara Santa Rosa di Poviglio" in the summer 2018 with the main purpose to verify the presence of a Po River palaeo-riverbed near the site, and to collect data on Holocene environmental transformations. A total of 292 pollen samples are under study. First results regard the more recent samples from the three cores, detailing land use and land cover after the Bronze Age. Pollen data suggest the decrease of agricultural land use in the area, with spread of wet meadows (Cyperaceae and aquatics) and environments rich of hygrophilous woods (with *Salix* and *Alnus*).

Palynological data add information to stratigraphical descriptions, radiocarbon dating, petrographic and organic matter analyses, in addition to the archaeological analyses. The strong interdisciplinary perspective facilitates the investigation of the climatic and anthropic contributions to environmental changes in the region, and their relationships with the different adaptive behavior of the Terramare people. The new palynological data obtained from off-site palaeoenvironmental analyses can integrate the on-site analyses already carried out showing evidence of local human activities (Cremaschi et al. 2016). The correlation between off-site and on-site studies is necessary to understand the lasting environmental changes at a regional scale (Mercuri et al. 2012).

References

- Cremaschi et al. 2016. *Quaternary Science Reviews* 136: 153–172.
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Mercuri et al. 2012. *Vegetation History and Archaeobotany* 21: 353–372.

Key-words: pollen, off-site cores, interdisciplinary, climate change, Po Plain

*Speaker