**Palynology to investigate environmental transformations on a long-term perspective in the Po Plain: the case study of the Terramara S. Rosa di Poviglio**

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Palynology is a key science to investigate long-term environmental transformations. The study of the "Terramara Santa Rosa di Poviglio" (1550–1170 BC) is funded by the project SUCCESSO-TERRA (PRIN-20158KBLNB - Human societies, climate-environment changes and resource exploitation/sustainability in the Po Plain in the mid-Holocene: the Terramare culture; Principal Investigator M. Cremaschi - Università degli Studi di Milano; https://www.successoterra.net; Cremaschi et al., 2018a). The geoarchaeological-palynological approach helps to show how climate (dry phase c. 3.6 ka cal. BP) and human actions (over-exploitation of the resources) act in synergy to shape woods and fields during the development and collapse of the Terramara culture. Palynological spectra (pollen, fern and moss spores, non-pollen palynomorphs–NPPs) together with micro charcoal analyses add information to archaeological and geoarchaeological data and radiocarbon dating. Three off-site cores were collected at different distances north from the site in 2018 (Cremaschi et al., 2018b) with the aim to verify the presence of a Po River palaeo-riverbed and to collect data on vegetation and landscape through about 300 pollen samples. Pollen analyses detail land use and land cover during and after the Bronze Age and add information about forest composition, wet environments, open areas, synanthropic plants, cereal cultivation and pasture. The data from the off-site analyses, compared with the on-site studies (Cremaschi et al., 2016), allow reconstructing environmental changes at a regional scale (Mercuri et al., 2012) and specific adaptive behavior of the Terramare people.

**Bibliografia**


