



Conferenza per giovani botanici 6-7 febbraio 2020 Rivolto a dottorandi e post-doc che abbiano finito il dottorato da massimo 3 anni.
partecipazione aperta anche a studenti magistrali e borsisti post-laurea.

Sessione 2 - Ecologia della vegetazione, macroecologia e biogeografia

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

Eleonora Clò¹, Elisa Furia¹, Paola Torri¹, Guido S. Mariani², Andrea Zerboni³, Anna Maria Mercuri¹, Mauro Cremaschi³

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 Chimiche e Geologiche, Università degli Studi di Cagliari, Italy

³ Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, Milan, Italy

pollen, long-term perspective, interdisciplinary, climate change, Po Plain

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 microcharcoal 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

Cremaschi M., et al. (2016) Climate change versus land management in the Po Plain (Northern Italy) during the Bronze Age: New insights from the VP/VG sequence of the Terramara Santa Rosa di Poviglio. *Quat. Sci. Rev.* 136: 153–172. <https://doi.org/10.1016/j.quascirev.2015.08.011>

Cremaschi M., et al. (2018a) The SUCCESSO-TERRA Project: a Lesson of Sustainability from the Terramare Culture, Middle Bronze Age of the Po Plain (Northern Italy). *IANSA* 9(2): 59–67. <http://dx.doi.org/10.24916/iansa.2018.2.8>

Cremaschi M., et al. (2018b) Poviglio S. Rosa Campagna di Scavo 2018. Tra Villaggio Piccolo e Villaggio Grande. Relazione preliminare. Dipartimento di Scienze della Terra "A. Desio", Milano.

Mercuri A.M., et al. (2012) A marine/terrestrial integration for mid-late Holocene vegetation history and the development of the cultural landscape in the Po valley as a result of human impact and climate change. *Veget Hist Archaeobot* 21: 353–372. <https://doi.org/10.1007/s00334-012-0352-4>