Sedimentological and micromorphological investigation on the fill of the Bronze age wooden pool at Noceto La Torretta (northern Italy)

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A recent excavation at Noceto La Torretta (Parma, northern Italy) revealed an exceptional archaeological structure, composed of a wooden pool, quadrangular in shape, about 12 x 6 m, up to 4 m deep. Since the beginning the pool appears as an unicum in the Prehistory of Europe (Bernabò Brea and Cremaschi, 2009); furthermore, it represents an important naturalistic and environmental archive and the sedimentary infilling undergone to sedimentological and micromorphological analyses. The Noceto La Torretta site is placed on the hydrographic left side of the Taro river, on the northernmost fringe of the Pleistocene Apennine terraces. On the basis of pottery type it is possible to attribute the structure to the Terramare culture (beginning of the advanced phase of the Middle Bronze Age, second half of XV century a.C.). Six radiocarbon dates are available up to now, and, once calibrated, they put the building and activity of the wooden pool between 1420 and 1320 cal. years BP.

On the basis of sedimentological and micromorphological analyses (Cremaschi et al., 2009) the stratigraphic sequence could be divided into four groups of units. A) Upper deposits, silty and sandy sediments deposited by colluviation in shallow water, interlayered by charcoal and diatom rich layers. B) Organic deposits, formed in deeper and anoxic water. C) Gyttja in a sandy-silty matrix; three main facies are present: pair of organic and inorganic laminae (O/I), poorly laminated gyttja, anoxic and clastic layers. D) basal deposits.

Considering the short time of the deposition inside the pool and the recurrent sedimentary facies, a seasonal control in sedimentation should be inferred. The gyttja-rich laminae should indicate the summer season, with intense biological activity inside and outside the pool, promoting a strong production of organics, while the anoxic and clastic layers are possibly related to the winter season (without production of organic matter). Finally, the O/I laminae represent the rain seasons (spring/autumn), marked by intense sheet-erosion of the banks of the pool.

References