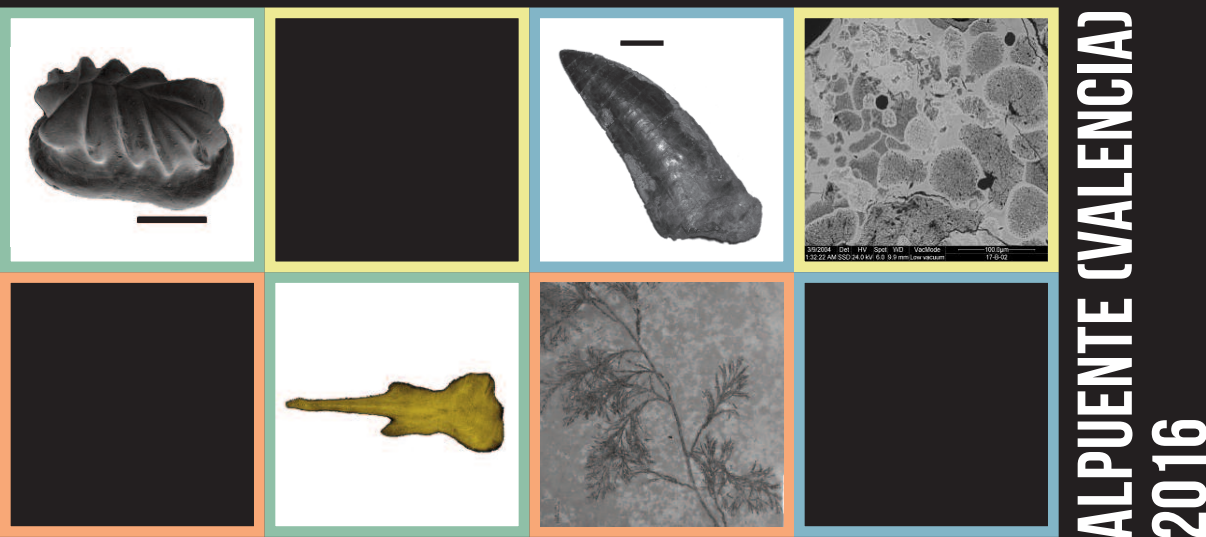


1ST INTERNATIONAL MEETING OF EARLY-STAGE RESEARCHERS IN PALAEOLOGY | 1ST IMERP
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New perspectives on the Evolution of Phanerozoic Biotas and Ecosystems



CONFERENCE PROCEEDINGS

The Late Pleistocene mammal assemblage from Ingarano (Apulia, southern Italy)

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The Late Pleistocene deposit of Ingarano was discovered in the second half of the 1980's, but only since 1992 studies on the complete stratigraphy started. The site is located in the North-Western side of the Gargano Promontory at 270 m a.s.l.; the fossiliferous deposit is thick 12 m and represents the filling of a karst cavity, developed in the limestone of the "Calcari di Sannicandro" Formation (Malm - Lower Cretaceous). The stratigraphic framework is composed by at least five depositional events (Layers A, B, C, D and E). The Ingarano succession can be subdivided in two sedimentary complexes: the lower one (Layers A, B and C) and the upper one (Layers D and E). A radiometric age of 58 ± 2 ky BP was provided for the Layer A, 40 ± 2 ky BP for the Layer B. Moreover, the find at the top of Layer D of 12 Mousterian lithic artefacts, that could indicate an age not younger than 35 ky (Petronio et al., 1996) suggest that the lower part of the deposit has to be referred to the MIS3 (Bedetti and Pavia, 2007), corresponding to the interval between 40 ± 2 ky and 35 ky BP. From Ingarano several specimens are referable to different species of macromammals. Well preserved and complete skulls and mandibles have been found, together with many limb bones, partially articulated. At present, the faunal list includes: Canidae, Ursidae, Mustelidae, Hyaenidae, Felidae, Bovidae, Cervidae, Equidae, Hippopotamidae, **Rhinocerotidae** and Elephantidae. The abundance of macromammals in optimal state of conservation and with articulated limbs suggests that the lower part of the

deposit can be related to the presence of a natural trap. At Ingarano many species of carnivores show morphological and biometrical peculiarities, therefore their taxonomy is discussed in the framework of the Late Pleistocene large mammal paleoecology and paleobiogeography. Among the herbivores taxa referable to different ecological niches occur (from rocky areas to plain terrains). In particular, we present the first report in the Ingarano mammal assemblage of the ibex (*Capra ibex*). A quantitative analysis and detailed taphonomic analysis of the deposit is still in progress. This rich and well preserved faunal assemblage, formed in a relatively short time interval, can provide useful information about the palaeoenvironment of an important area of the Northern Mediterranean Basin during the Late Pleistocene.

References

- Bedetti C and Pavia M. 2007. Reinterpretation of the late Pleistocene Ingarano cave deposit based on the fossil bird associations (Apulia, South-Eastern Italy). *Rivista Italiana di Paleontologia e Stratigrafia*. 113: 487-507.
- Petronio C, Billia E, Capasso Barbato L, Di Stefano G, Mussi M, Parry SJ, Sardella R and Voltaggio M. 1996. The Late Pleistocene fauna from Ingarano (Gargano, Italy): Biochronological, palaeological, palaeoethnological and geochronological implications. *Bollettino della Società Paleontologica Italiana*. 34 (3): 333-339.