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## Building materials of the Apulia region (Southern Italy): the quarries of the "pietra gentile"

A. Calia, G.Locuratolo, L.Matera, M.Sileo

C. N. R. – Institute of Archaeological Heritage. Monuments and sites, Lecce, Italy (a.calia@ibam.cnr.it, g.locuratolo@ibam.cnr.it, l.matera@ibam.cnr.it, m.sileo@ibam.cnr.it / Fax: +39 0832-422225)

This research concerns the study of calcarenitic materials, widely used in the Mediterranean basin both in historical and archaeological context. It is aimed to study these materials for preservative purposes, as well as to correlate materials from quarries and artefacts.

The present paper deals with the study of a soft calcarenite of the Apulia region (Southern Italy), named "pietra gentile", which outcrops in the Salento area; thanks to its characteristics of soft stone it combines good technical properties and performance with a relative facility of extraction and cutting. For these reasons this calcarenite is used since the ancient time as constituent material in archaeological artefacts, as well as constructional materials in historic buildings of the area.

The study for the identification of ancient and active quarries has been carried out. It is based on:

bibliographic and archive research;

identification and census of the extraction sites by means of analyses of aerial photographs and field survey;

mapping of the ancient and active quarries;

preliminary mineralogical, petrographic and porosimetric study of representative samples from different quarries.

All the information have been collected in a databank finalised towards the knowledge and documentation on historical stone resources.

This study is the preliminary step of a wider research aimed to the improvement of the knowledge of this stone material, in order to identify significant parameters for the provenance determination of the materials of the artefacts, as well as correlation parameters between the intrinsic characteristics of the stone and its durability.