ARCHAEOBOTANICAL INVESTIGATIONS IN A SMALL-SCALE ROMAN AGRO-PROCESSING SITE AT CASE NUOVE (TUSCANY, ITALY)

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The Roman Peasant Project was begun in 2008 as a systematic investigation of Roman non-nobility in the townships of Cingiano (GR) (Ghisleni, Vaccaro and Bowes, 2011). The project uses the results of a surface (Ghisleni, 2010), excavating a cross-section of the smallestest of these sites with the goal of illuminating the complexity of Roman peasant life-ways and environmental interactions. Now in its fourth season, the project has excavated some 8 sites and so-called off-sites, the majority of which have emerged not as habitation, but as production sites of various kinds.

This report details the excavations and accompanying studies carried out at the site of Case Nuove, a site identified by surface survey as a possible rural house, but which excavation and materials analysis suggest was a small scale agro-processing point. The article considers the problems this site type presents for interpretations of the Roman landscape, the relationship between small-scale agro-processing and villa agriculture, and the possibility of a collective use of such processing points by cooperative groups of farmers.

In the site, combining botanical and archaeological evidences, and considering the peculiar geomorphological conformation of the poggio, probably the economic plants were transported for processing on the top of the site. These plants prevalently consisted of cereals of different species, and olives and grapes. It is probable that not large yields were transported on the top as not large plant accumulations (pollen or fruits) were found.

The archaeological investigation on samples from Case Nuove (Fig.2) was carried out with the first aim of contributing to understand the use and economy of the site. Moreover, the floristic lists permit to infer the main habitats and environments spread in the surroundings. In the framework of the multidisciplinary analysis, the integration with data obtained from other archaeological sites allows to reconstruct the plant landscape of the area.

The analyses have been carried out on microscopic and macromorphological remains found in layers from the archaeological site of Case Nuove. The integrated analyses of pollen, non pollen palynomorphs, charcoal particles and seeds/fruits help to obtain interesting details on the site function, land use and sequence of these archaeological contexts (Fig.3). Pollen samples (17 samples) and macroremains (5 samples) were taken from two short sequences, from the square pit (US5044/S033) and from the dolium (US5015/S052), and from two samples taken from the US5013, while sediments for macrofossil flotation were taken from four different contexts (silo, basin, square pit and cistern).

The pollen spectra (Fig.4) show the presence of Alicante (US 5044/S033) and of the dolium (US 5015/S052) and from two samples taken from the US5013, while sediments for macrofossil flotation were taken from four different contexts (silo, basin, square pit and cistern).

Case Nuove and the other sites studied in the Roman Peasant project were included in syntheses on pollen from twenty-six archaeological sites. Analytical data were reviewed to investigate the development of human-induced environments through the presence of the Olea-Juglana-Caetana group (OJC) and selected Anthropogenic Pollen Indicators (API). The sites are located in six Italian regions - Veneto, Emilia Romagna, Tuscany, Basilicata, Calabria, and Sicily - and in the Republic of San Marino. Chronology spans from the Bronze to the Renaissance ages, from approximately 4200 to 500 years cal BP. The OJC sum is not present in the Roman sites from Tuscany (Fig.5). In samples from Case Nuove, only Olea pollen was found (Mercuri et al. 2013a).

The API pollen are common in all the archaeological sites (Fig.6). The most frequent API taxa in pollen spectra are seven: Artemisia, Centaurea, Cichorieae and Plantago are ubiquitous and therefore they have the major relevance, followed by cereals and Urticae, and by Trifolium type. They can actually be considered important markers of human activity and anthropization in the Mediterranean area (Mercuri et al. 2013b).