

## THE CITY OF PARMA (EMILIA ROMAGNA, ITALY) IN THE ROMAN AND MEDIEVAL PERIODS: SEEDS AND FRUITS, POLLEN AND PARASITE REMAINS

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Archaeobotanical analyses have been carried out on material from the site of Piazza Garibaldi at Parma, a city located in the plain of Emilia Romagna, a region of northern Italy. The studied layers were dated to the 4<sup>th</sup> – 2<sup>nd</sup> centuries BC, around the time of the foundation of the Roman state, and to the 9<sup>th</sup> – 12<sup>th</sup> centuries AD. In Roman times the site was probably a sacred area, while in the medieval period it was a market square. Data from pollen and seeds/fruits were useful for both palaeo-environmental and palaeoethnobotanical reconstructions.

Oak woods and hygrophilous woods grew far from the site, while human activities highly influenced the environment in early times. Cereals, legumes and hemp were probably cultivated together with chestnut trees, figs, grapevines and members of the Pomoideae. Moreover, a number of medicinal/ vegetables/ spice plants were present. *Papaver somniferum* and *Coriandrum sativum*, together with *Fragaria vesca*, were characteristic in the seed record. Altogether, archaeobotanical data correspond well to votive offerings to several gods, and particularly some of them including opium poppy and cereals would have been offered to Demeter/Ceres, the goddess of crops and soil fertility.

Concerning the Middle Ages, the archaeological structures which were studied included four pits and one latrine. Analyses of plant and parasite remains have suggested that the infillings consisted of waste, human and animal excrements, deteriorated vegetable food and marc (winemaking waste). In particular, human parasite remains belonging to the genera *Ascaris* and *Trichuris* were found in the latrine, while parasites of animals such as species of *Capillaria*, *Dicrocoelium dendriticum* and *Diphyllobothrium* were also present in pits. Pollen from entomophilous plants (such as *Digitalis purpurea* which lives wild today only in Sardinia) were common in the latrine, possibly also due to human consumption of honey. Cultivated fields of *Triticum aestivum/durum/turgidum*, *T. monococcum*, *T. dicoccum* and other cereals, together with legumes, grapevines and fruit trees were grown in the area. Some olive trees were probably cultivated in the hills. Many wild plants were found in the deposits, including *Agrostemma githago* and *Thymelaea passerina*. The archaeobotanical record from the Medieval period revealed two main 'agro-ethno-botanical' features this city: a) a particular consideration for *Prunus spinosa* whose fruits are still today collected and prepared as an alcoholic drink ("*Bargnolino*"); b) a low consideration and importance of *Cucumis melo* in the economy of this area compared with other areas of Emilia Romagna such as the provinces of Ferrara and Ravenna.

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