

EVOLUTION OF ARABLE WEED FLORA DURING THE PROTOHISTORIC AND EARLY HISTORIC PERIODS IN NORTHERN GAUL: A STATISTICAL APPROACH TAKING ACCOUNT OF ARCHAEOBOTANICAL RESULTS AND POLLEN STUDY SURVEYS IN PRESENT-DAY NON-MECHANISED AGRICULTURE

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Archaeobotanical studies carried out on 89 farm settlements and 30 storage contexts revealed important changes in the composition of the arable weed flora in northern France, especially between the Iron Age and the beginning of the Gallo-Roman period (1st century BC – 1st century AD). New species, such as *Myagrum perfoliatum* and *Centaurea cyanus*, are encountered and the importance of other ones, such as *Agrostemma githago*, *Lithospermum arvense*, *Orlaya grandiflora* and *Torilis japonica*, increases considerably.

Considering the continuous diversification of the weed flora in northern France, and the multiplicity of the factors involved in those changes, it is not easy to determine their cause, but the introduction of a spring sown crop in agricultural systems, the importance of naked wheat cultivation, and the development of cereals in long distance trade are probably part of the answer.

It is a fact anyway that the reconstruction of ancient plant communities remains quite problematic, so that the necessity of comparison models taking account of the archaeobotanical data has been underlined. Approaches such as the FIBS developed by Bogaard, Jones, Charles and collaborators, on the basis of dry farmed and irrigated fields in northern Spain, have already greatly improved the interpretation of archaeological plant assemblages.

The possibility of extending botanical surveys to regions of similar weather conditions to the ones investigated here is examined. Regional surveys of the arable weed floras in places with present day non-mechanised agriculture appear as an emergency, since these floristic areas are often unprotected and clearly endangered in many parts of Europe. From this point of view, Romania represents a particularly favourable study area in the European context because of its geographical and historically original situations. So, to get a better understanding of the agricultural systems of northern Gaul, an ecological reference has been elaborated in this area. In this poster, we will discuss the potential and the limits of this crossed approach.

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