

Plants macrofossils from the Roman Vicus at Mamer «Op Bierg II», Luxembourg

Preliminary results regarding Roman plant food in Northeastern Gaul

Geneviève DAOULAS (daoulas.genevieve@orange.fr) [1,2,3]

[1] GéoArchÉon, 38 rue de la Victoire, F-55210 Villeloup-les-Coteaux
 [2] Université Paris 1 Panthéon-Sorbonne, 3 rue Michelet, F-75006 Paris
 [3] UMR ARSéAn-équipes environnementales, MAE 21 allée de l'Université, F-92023 Nanterre cedex

RESEARCH QUESTIONS

The studied well was used for dumping cesspit material and domestic wastes. Two principal questions are addressed:

- What does archaeobotanical analysis of the well's contents reveal about the alimentation of the site's inhabitants?
- How was the subsistence economy organised (exploitation of natural resources, cultivation, roman trade and commerce)?

CONDIMENTS 5 %



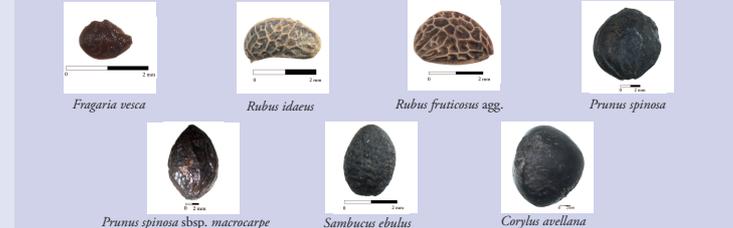
- Likely cultivated in gardens spaces
- Used in alimentation as aromatic herbs
- Also used medicinally as digestive aids, anti-inflammatories and against intestinal parasites (e.g. coriander)

OIL- AND FIBRE PLANTS 3 %



- Generally cultivated in gardens areas
- Used to extract oil. The seeds are consumed
- Fibre was used for textile production; flax was the principal vegetable fibre used in Antiquity

COLLECTED WILD FRUITS 22 %



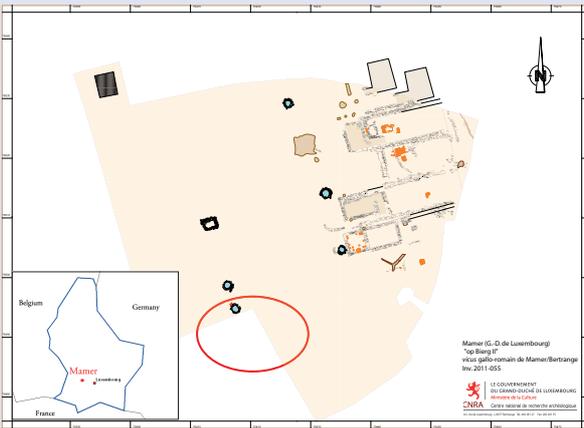
These species occurred in a landscape shaped by Man, for example at the edges of the forests, borders of the fields and in the vegetation of the hedges. Thus they were most likely collected in the direct surrounding of the vicus.

But the use of *Sambucus ebulus* may have arrived as a contamination of the cereals.

- They indicate the use of wild plant resources to supplement the diet.

THE SITE

Discovered in 2011 during excavations of the CNRA (Centre National de recherche archéologique du Grand-Duché du Luxembourg) directed by Matthias Paulke. The vicus of Mamer «Op Bierg II» (Dövenor 2011), occupied during 1st c. AD and Vth c. AD, was located in the province of *Gallia Belgica*. Four buildings were discovered, aligned along the main road of the vicus. Four wells were discovered behind these buildings, three of which were sampled for archaeobotanical remains. This study presents the preliminary results of the archaeobotanical analysis of one of these wells.



MATERIALS AND METHODS

The sample was processed using flotation and wet sieving (1 and 0,5 and 0,315 mm mesh-sizes) and sorted under a stereomicroscope. Plant remains were identified using Jacomet (2006), Beijerinck (1947) and Cappers (2006). Nomenclature follows Lambinon *et alii* (2004). 1990 waterlogged plant remains were recorded. The taxa observed include: two cereals, three oil-fibre plants, four condiments, two legumes, six cultivated fruits, eight collected fruits and 66 additional wild plants taxa.

VEGETABLES 1 %

Carrot was used both as a food and a medicine. Cultivation is attested to by Roman writers, such as Dioscorides, using the term «staphylinos». In our case we cannot decide if carrot was a used plant or just a wild plant occurring in the spontaneous ruderal vegetation of disturbed areas.

Actually *Cucumis melo* is not recorded from Iron Age sites. However, it is frequently recorded from Roman settlements, if waterlogged sediments of wells and cesspits were studied. In northeastern Gaul it must be considered an indicator of Roman alimentation habits.

CULTIVATED FRUITS 25 %



These provide evidence of fruit-growing. They were probably cultivated near the vicus. Very few grape pips were recorded, making it difficult to determine whether they were cultivated locally or obtained through importation.

- The remains of cultivated fruits are providing evidence of developed Roman fruit cultivation.

The presence of local fig trees cannot be excluded, but figs were probably most commonly imported as dried fruits from the Mediterranean Basin.

DISCUSSION

First approach of the vegetal economy of the vicus

The data allowed obtaining some preliminary observations concerning the vegetal economy of the vicus:

- The waterlogged context studies allow a specialized perspective on the consumption of vegetal resources.
- Local cultivation of vegetables and condiments is plausible. The high proportion of fruit remains suggests local growth of fruit trees (Pline, *Naturalis Historia*, XV).
- Most wild fruits recorded are edible and seemed to have played an important role in the diet of the site's inhabitants.
- Certain fruits were mostly likely imported. For example, fig trees can grow north of the Alps, but their fruit rarely ripens. Thus, the presence of fig seeds is likely the result of the importation of dried fruits.

Gallo-Roman trade, commerce, and cultivation in northeastern Gaul

- The corpus of vegetal resources recorded is similar to that observed at other *vici* (Dalheim [König 1994], Alésia [Wiethold 2003], Horbourg-Wihr [Schaal 2009], Odenburg [Vandorpe 2011a, 2011b]). These taxa are typical for the Gallo-Roman period. Nevertheless, the social status of the vicus of Mamer «Op Bierg II» cannot be accurately determined until the remaining wells are analysed.
- The status of the plants observed is difficult to discern because they may represent: 1) native species that occur locally, 2) foreign species were introduced into local farming practices, or 3) imported goods for consumption. The majority of the species could have been introduced and cultivated in northeastern Gaul. However, some, such as *Cucumis melo* and *Ficus carica*, are difficult to cultivate in the region, and thus may indicate direct contact with the Mediterranean region.
- Evaluating the Romanisation of Gaul is difficult using only archaeobotanical data. Nevertheless, certain taxa may provide evidence of this phenomenon in northeastern Gaul. For example, although *Cucumis melo* is absent at Iron Age sites, it appears at Roman *vici* in significant frequencies.

BIBLIOGRAPHIE

- Dövenor F. - «*Tabula roa...at in der Brunnen*» in *Unter unseren Füßen/Archéologie in Luxembourg 1995 - 2010*, exposition au MNHA du 20 octobre 2011 au 2 septembre 2012, Luxembourg, 2011, p.109 à 114, ill.
- König M. - «Die Pflanzenfunde in Coldland E - Eine Brunnenverfüllung aus dem römischen Vicus Dalheim», Sonderdruck aus *Hinrichs* 46, 1994, p. 798-810.
- Schaal C. - «Evaluating carpological du site» in *Bonvalot E. - Horbourg-Wihr (Alsace, Haut-Rhin), Rue du 8 mai 1945, rapport de diagnostic, Pôle d'archéologie Interdépartementale Rhénan*, 2009, p. 33 à 37.
- Vandorpe P. et Jacomet S. - «Remains of burnt vegetable offerings in the temple area of Roman Odenburg (Biesheim-Kunheim, Alsace, France) - First results.» In: *Wiethold J., Carpiologie. Actes réunis à la mémoire de Karen Lundström-Beaudas*. Actes de la table ronde organisée par Bibracte, Centre archéologique européen, et le Centre de Recherches Archéologiques de la Vallée de l'Oise, 9-12 juin 2005, Glux-en-Glenne- Bibracte. Centre archéologique européen, 2011, p. 87-100 (Bibracte, 20).
- Vandorpe P. et Jacomet S. - «Plant economy and environment» In *Raddé M. - Odenburg, volume 2: L'agglomération civile et les sanctuaires*, vol. 2: Matériel et études. Monographies des RGZM; 79/2, 2011, p.3-72.
- Wiethold J. - «How to trace the Romanisation of central Gaul by archaeobotanical analysis? Some considerations on new archaeobotanical results from France Centre-Est» in *Actualités de la Recherche en Histoire et Archéologie agraires*. Actes du colloque international AGERV, septembre 2000. Besançon: Presses Universitaires Franc-Comtoises, 2003: 269-282 (Annales Littéraires; 764. Série "Environnement, sociétés et archéologie"; 5).

ACKNOWLEDGEMENTS

I am grateful to GéoArchÉon, especially Henri-Georges Naton, and the CNRA of Luxembourg for entrusting this study to me. I am also grateful to have received the support of Matthias Paulke (CNRA, Luxembourg) and Julian Wiethold (Inrap, Metz). Thanks are also due to C. Petit (Université Paris 1), P. Ouzoulias (CNRS) and M. Elliott for their help.

