Introduction and Objectives

In spring 2011, a multidisciplinary team in bioarchaeology was created at the Royal Belgian Institute of Natural Sciences (RBINS) to collaborate with archaeobotanists on rescue excavations realised by the Public Service of Wallonia (SPW) in Southern Belgium. The majority of discovered sites over the last two years is attributed to the Medieval Period, which led us to conduct a review of all Medieval sites where archaeobotanical analyses were carried out for the development of preventive archaeology in Wallonia in the 90s and even before. This presentation is to make a synthesis of previous and new archaeobotanical data, including mainly seeds and fruit studies but also wood charcoal and pollen analyses, in the Wallonia region and to propose future research issues which could be developed in the medium term.

Critical review of the archaeobotanical dataset: A non homogeneous distribution (spatially, temporally and between disciplines)

- 25 archaeological sites investigated before 2011 + 3 new sites studied by the new RBINS team.
- The study of seeds and fruits concerns 19 sites, pollen analyses 15 sites and charcoal analysis only 4.
- 6 sites integrate a multi-proxy approach, 3 of which recently studied by the bioarchaeological team.
- Most of these sites involve 2 disciplines, only 1 before 2011 integrates the 3 disciplines.
- Most documented areas are provinces of Liège (11 sites) and Hainaut (8 sites) thanks to the construction of a high-speed line train (TGV) between 1995 and 2003.
- Most of these sites involve 2 disciplines, only 1 before 2011 integrates the 3 disciplines.
- The provinces of Luxembourg (LUX) and Brabant (BR) offered no or only 1 site before 2011.
- The Late Middle Age is the most represented period (number of sites and of structures, of types of structures and of number of remains) thanks to a majority of waterlogged preservation.
- High number of Early Middle Age sites, but only few structures and carbonized material are investigated.
- The High Middle Age is under-represented.

First archaeobotanical results

Crops and agricultural practices

Throughout the Medieval Period, the main cultivated cereals are wheat (Triticum aestivum/durum/turgidum) and rye (Secale cereale), followed by hulled barley (Hordeum vulgare) and oats (Avena sativa). Speck (Trifolium spelta) is present sporadically all along the Medieval Period whereas Panicum miliaceum (hog millet) is recurrent in the Merovingian period and seems to be scarce for the other periods. In Belgium, written sources indicate that culture of speck continues in the region of Namur until the 19th c. During the Early Middle Age, pulses are diversified: peas (Pisum sativum), grass peas (Lathyrus sativus), common vetch (Vicia sativa), Lentils (Lens culinaris) and field beans (Vicia faba var. minor). From the High Middle Age, peas, lentils and field beans become the dominant legumes. There are great similarities with the results of Northern France for the cereals, with the exception of speck for the cereals and for the lens of the legumes which is replaced by the common vetch.

Spices and condiments / fiber plants and oiseds

Very few spices and condiments are mentioned for the Early Middle Age, only coriander (Coriandrum sativum) is present during the Carolingian period. However, the diversification of spices used and condiments starts in the 12th c. For the fiber plants and oiseds, flax (Linum sp. and L. usitatissimum) and cameline (Cannabina sativa) are present from the Merovingian period and during all the Medieval Period. Only one seed of hemp (Cannabis sativa) has recently been found in Clairefontaine (LUX) attributed to the 14th-15th c.

Perspectives of research

In the current state of research, we must be cautious about the synthetic results presented, as some provinces are really poorly represented. It is especially the case for charcoal analysis which accounts only 4 sites, but also for pollen analysis, the dataset of which is highly heterogeneous (site distribution, number of contexts and dating precision). Issues such as the agro-pastoral practices, the use of wood and the management of local plant resources can not thus be addressed yet. In the medium term, the available data, integrated with the multi-proxy analysis of 42 new Medieval sites prospectively, will allow us to work on specific issues as food consumption, horticulture, fruit growing and the introduction of allochthonous species.