

ABSTRACT

Archaeobotanical data are often a mixture of material of different origins. The formation process of archaeobotanical records can often be different. Hence it is important to understand the structure of these fossil records before the data are used for various reconstructions and interpretations. The aim of my diploma thesis is to identify the taphonomic causes of differences between synanthropic species from different archaeological sites using plant traits. The greatest differences between sets of species in archaeobotanical situations are due to the way of preservation, *ie.* between charred and non-charred (waterlogged) macro-remains. My diploma thesis is based on data from the Archaeobotanical database of the Czech Republic. I focused on the Middle Ages, which is the best period in terms of the number of species and the number of sites. Using multidimensional analyses, I examined the structure of archaeobotanical data and then selected a relevant dataset to examine the differences in species composition between different types of conservation. After that I correlated the results with the species traits. I found that the structure of archaeobotanical data is very heterogeneous. In each of the two types of conservation, different species are preserved. These species are characterized by a different set of traits. The charring preserves mainly annual species with larger seeds, and therefore with a higher terminal velocity. In the charred samples, there are mainly macro-remains of crop weeds. The species with a more persistent seed bank are preserved in a non-carbonized (waterlogged) form. These are species which grow in habitats with low stress and less intensity disturbance compared to the group of species with charred seeds. The dispersal strategy of plant species plays a main role in seed preservation. To interpret plant traits associated with the type of preservation, it is important to know how the plant material was manipulated in the past, because human influence has a great effect on this. Using the example of the locality Nesvětice, which I processed and analysed by myself. Further I demonstrated the importance of working with archaeobotanical databases, because for interpretation of broader issues concerning the society and the environment of that time, data from a single site is often not enough.

Key words: plant macroremains, archaeobotanical database, macroremain analysis, synanthropic species, traits of plants