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The contribution of micromorphology to study Dark Earth: the example of Brussels (Belgium)

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For a long time Dark Earth, has been considered as a poorly stratified enigmatic phenomenon of rather ephemeral interest for the archaeological record. Last decades, however, interdisciplinary studies in have demonstrated their huge archaeological potential for studying the medieval urban development (MACPHAIL, 1994; CAMMAS, 2000; DAVID et al., 2000; MACPHAIL, 2003; VERSLYPE & BRULET, 2004; NICOSIA, 2006). Especially micromorphology has proven to be a rather powerful tool to understand the formation processes of these homogeneous units.

Besides classical micromorphological analysis and description, the study of the Brussels' Dark Earth involved the development of phytolith analysis of soil thin sections (VRYDAGHS et al., 2007). Such integrated studies contribute significantly to demonstrate that the formation of the Dark Earth results from multiphased processes whereby various human actions interact with natural phenomena. The formation and transformation of Dark Earth can be understood as an ongoing process of accumulation, erosion, decomposition and homogenisation that stops once the Dark Earth gets sealed. Among the identified human activities pasture, agriculture, quarrying, destruction and middening can be cited.

Taken into account that the Dark Earth results from such a variable amalgam of activities and natural phenomena, it can be concluded Dark Earth should be investigated on a individual basis. Their systematic study can enhance our knowledge of the diversity of human and natural events that took place in medieval Brussels, and as such contribute to the understanding of its emergence and development.

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