Pedoanthracology, a relevant tool for past ecosystems and landscapes reconstruction

Brigitte Talon *1

¹Institut méditerranéen de biodiversité et d'écologie marine et continentale (IMBE) – Université d'Avignon et des Pays de Vaucluse : UMR7263, Aix Marseille Université : UMR7263, Institut de recherche pour le développement [IRD] : UMR237 : UMR7263, Centre National de la Recherche Scientifique : UMR7263 – Aix Marseille Université, Campus Etoile, Faculté St-Jérôme case 421 Av. . escadrille Normandie-Niemen 13397 MARSEILLE CEDEX 20, France

Abstract

Origin of present day vegetation is closely related with anthropic activities. Therefore historical and palaeoecological data should be more considered when facing environmental management, especially in context of socio-economic mutations. Since more than 30 years, pedoanthracology allows the investigation of past occurrences of fire events and the taxonomic identification of the correlated burnt woody vegetation by anatomical analysis and absolute dating of charcoal fragments which are present in soils and soil sediment sequences. This original approach contributes in a better understanding of past ecosystems and lanscapes structures related to anthropic activities (origin of alpine meadows and mediterranean grasslands, holocene forests composition, naturalness). This comunication provides a brief overview of the recent developments in pedoanthracology, focusing on why this discipline would be very helpful for the current ecological studies.

^{*}Speaker