PLANT BIODIVERSITY AND ECOSYSTEM SAFEGUARD:
LEARN FROM THE PAST TO PLAN THE FUTURE

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Abstract

This thesis project is aimed at using **pollen analysis** to study the transformations of the vegetation cover under climate changes and human pressure. Particular attention will be given to the study and understanding of **environment/society dynamics**: how the environmental transformations influenced choices and development of the human societies and how people determined environmental transformations that led to the situation we are living today?

Some **archaeological and natural sites** have been selected for this project with chronologies spanning from the Late Glacial to the Middle Holocene with particular focus on the last millennia; this will allow to study, in a long term perspective, environmental changes and assess the **natural and anthropogenic forces** involved in the ecosystem dynamics. The selected area is **Northern Italy** (especially the Po Plain and the neighbouring areas), that were settled by different cultures in a period ranging from the Paleolithic to the end of the Bronze Age. **Pollen analyses** will be carried out on samples of some selected sites of archaeological importance: Palù di Livenza (PN), Gardolo (TN) and Monte Valestra (RE). Moreover, a number of other archaeological sites with already available pollen data (for example in the BRAIN network - http://brainplants.successoterra.net/) will be integrated for **large scale palaeoenvironmental data elaboration**. Some of them could be Casinalbo (MO), Baggiovara (MO), Montale (MO), Poviglio Santa Rosa (RE), Via Tolara (RE), Lugo di Romagna (RA), Travo (PC), Le Mose (PC), Fondo Paviani (VR), Fimon le Fratte (VI) and Palughetto (BL) that have a chronology from Paleolithic to the end of the Bronze Age. Long-core pollen sequences showing a wider chronology, such as back to the Late Glacial, will be selected and integrated in data elaboration (e.g. Pavullo peat, S-core near Poviglio) as they can be useful for comparisons and to discuss the issue of when the human impact began to strongly influence the vegetation and local environmental characteristics.