UNIVERSITÀ DI PAVIA
DIPARTIMENTO DI SCIENZE DELLA TERRA E DELL'AMBIENTE
DOTTORATO DI RICERCA IN SCIENZE DELLA TERRA E DELL'AMBIENTE

FORM PER PROGETTI BANDO DOTTORATO

1. Project title

Dry-acidic alluvial vegetation dynamics of the western Po Plain in a functional traits perspective: implications for ecological restoration

2. Proposer

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4. Key words
(Max. 5 – at least 2)

Dry-acidic plant communities, Vegetation dynamics, Western Po Plane, Functional traits, Restoration ecology

5. Abstract
(Max.1.500 characters with spaces)

Vegetation studies have been traditionally carried out by means of the floristic approach offered by phytosociology and symphytosociology. These disciplines allow us to understand the composition of plant communities related to their ecological context and the relationships between them. However, vegetation functionality remains poorly investigated, though it has proven to give significant insight on species' ecological strategies, and thus on ecosystem processes. Indeed, recent studies have highlighted the role that a trait-based approach could have to inform nature-based solutions to protect, manage and restore natural ecosystems. This could be particularly relevant in highly degraded and anthropized contexts such as the Po Plain. Here, unravelling the still little-known dynamics of the relict dry-acidic alluvial vegetation, still occurring along some rivers, through a phytosociological and functional approach could provide a profitable model for ecological restoration both in nature and in urban areas. In order to do so, this vegetation dynamics will be studied by means of both phytosociological relevés, to characterize the communities related to the different successional stages, and functional traits, to understand how these communities have adapted to these challenging environmental conditions. Expected results include a phytosociological review of the vegetation dynamics, its functional characterization and indications for ecological restoration based on it.