**Harmonization and management of digital archives for the Italian flora and biogeographic analyses**

**Rationale**: National research in plant taxonomy, plant ecology and plant geography, is producing a wealth of biodiversity data. While part of these data is available online, sometimes also in the form of searchable online aggregators, we are still far from an ideal situation, in which fragmentation of the resources is absent, or limited, and digitization of existing data is (almost) complete. Italy still lacks of a common infrastructure for data aggregation and management, which could also provide web services to researchers.

Thanks to the PON project LifeWatch Plus, the University of Bologna is becoming the botanic digital biodiversity center in the country. However, this center must be populated with data, resources, and services, in order to become useful to the scientific community.

**Objective**: This project, developed by the Department of Biology of the University of Pisa, gives the opportunity to access the largest archive of floristic data available online for the Italian territory. To generate a contribution for the aggregation of digital resources for botany in Italy focusing on floristic themes. The collected data in Wikiplantbase will be made interoperable and they will be merged with the national Hub of LifeWatch, contributing to its development, strengthening and to an increasing sharing of floristic data, with the aim to develop a network with the main European and international initiatives and projects.

**Work plan**: the researcher in charge of the work will work in the field of biodiversity informatics, developing the digital infrastructure, and, when necessary, standards, protocols, and novel strategies.

The project is based on a two years perspective, and the work plan is explained below:

1. Analyses of available data sources and typologies at national level on distribution data for vascular plants, with particular emphasis on the integration of the Wikiplantbase project in the national Hub for biodiversity and ecosystem research of LifeWatchPLUS.
2. Increase available resources in Wikiplantbase # Italy, to expand the potentiality of data archiviation, to conduct new data inspections, to develop new tools highlighting taxonomic and/or geographic gaps, to analyse floristic data.
3. Formulate new tools in the field of VRE for the analysis of spatial and temporal patterns of distribution of native and alien vascular plants.