

## European Vegetation Archive Data Request Form

To obtain data from the European Vegetation Archive (EVA), please first enquire the EVA database administrator Ilona Knollová (ikuzel@sci.muni.cz) whether the data meeting your needs are available. If they are, please fill in the form below and submit it to Ilona or another member of the EVA Coordinating Board.

Applicant's name:

Alessandro Chiarucci, Francesco Santi, Riccardo Testolin, Piero Zannini

Applicant's institutional address:

BIOME Lab, Department of Biological, Geological and Environmental Sciences, Alma Mater Studiorum - University of Bologna

Applicant's e-mail:

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Project title:

Climate change effects on plant biodiversity on small Mediterranean islands

• Brief description of the aims and methods of the study:

We aim to assess and quantify the effects of climate change on plant biodiversity on small Mediterranean islands.

First, collected plots will be used to perform a gap analysis, to check which islands are not covered by EVA. We will look for plots not already stored in EVA, with the aim of digitalising those data to improve the database coverage for Mediterranean islands regardless of size.

The obtained data set will be firstly used to describe plant biodiversity patterns on Mediterranean islands, in terms of species composition, species richness and beta diversity.

Finally, a set of data with enough spatial accuracy and at least 40 years old will be used to prepare a data set for a resurvey project, in order to check climate change effets on plant biodiversity. A cooperative resurvey approach will be organized, involving colleagues from different countries (a questionnaire will be prepared for this); climatic data for the last 40 years for each island will be obtained by an already discussed cooperation with CMCC, the Italian Focal Point of IPCC (<a href="https://www.cmcc.it/">https://www.cmcc.it/</a>). Resurvey data will be used to test for deviation from the expectations of the Equilibrium Theory of Island Biogeography, with a specifically built hypothesis to deal with warmer climate.

- Will someone else be involved in data editing or analysis in addition to the applicant?
   Other members of BIOME Lab at Bologna University will be involved.
- Estimated time of delivery of results (e.g., manuscript submission):

2024-2025

• Geographic area needed (e.g., countries or range of geographic coordinates):

Islands inside the Mediterranean basin (regardless of size)



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 Do you need plots to be georeferenced? If so, what is the minimum accuracy of plot location (in metres or kilometres) needed for your project?

We request all georeferenced and non georeferenced plots on islands. For georeferenced ones, it would be helpful if the accuracy was indicated for every plot.

Vegetation types needed (syntaxa):

All vegetation types

Other data selection criteria:

None

Envisaged publications:

1-3 papers in international journals. If the journal requires the processed dataset deposition in a public repository, we will not deposit the original data. Instead, we would deposit the minimum information necessary for repeating the analysis (see Data deposition).

• Data deposition. Some journals require data used for the analysis to be stored in a public repository to ensure the repeatability of the analysis. According to EVA Rules, you are not allowed to store the original vegetation-plot data obtained from EVA. However, if you plan to publish in such a journal, you may deposit a reduced EVA-derived dataset that (1) would make it possible to repeat the analysis published in the paper and (2) does not contain any information not used in the analysis. For example, such a dataset can contain only a subset of species (e.g., only angiosperms or only neophytes), or replace species names with codes, or replace species cover values with presences/absences, or remove all the header data, or replace the exact plot coordinates by coarse grid-cell coordinates etc. If you plan to deposit reduced information from vegetation plots, please describe here what might be deposited. If the project developed so that you needed to deposit more information than specified here, you would need to ask specific permission from the Custodians of the EVA databases used in your analysis before the dataset is deposited.

According to journal rules we could deposit a restricted version of the dataset where species names are replaced with codes, cover values with presences/absences and coordinates are removed

• Plant trait data from the TRY consortium. If you plan to combine your analysis of vegetation-plot data with plant trait data, you can also request for a dataset of 18 gap-filled traits for a large number of plant taxa prepared by the TRY consortium. These traits include Leaf area, Specific leaf area, Leaf fresh mass, Leaf dry matter content, Leaf C, Leaf N, Leaf P, Leaf N per area, Leaf N:P ratio, Leaf delta15N, Seed mass, Seed length, Seed number per reproductive unit, Dispersal unit length, Plant height, Stem specific density, Stem conduit density, and Conduit element length. This dataset can be provided to you from the EVA manager together with the vegetation-plot data. If you use this dataset, you must inform about your project the TRY data contributors who might be potentially interested and invite them as potential coauthors, assuming they will make an intellectual contribution to your paper. The list of the TRY data contributors will be sent to you together with the gap-filled trait dataset.

No

• Specification of the co-authorship arrangements in publications based on the requested data. Note that the EVA Rules recommend that co-authorship is offered to a representative of each database providing data that are particularly important for the project (e.g., a relatively large proportion of the final dataset used in the analyses or data from unique vegetation types or under-represented geographic areas). This database representative should be an expert in the topic of the project (not



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necessarily the custodian or deputy custodian), and this person should contribute to the project more than just by providing the existing data, e.g. by intellectual contribution to the concept of the paper, preparation of new data, or helping with data analysis, interpretation of the results or writing parts of the paper (see the IAVS Code of Professional Ethics: http://iavs.org/Governance/Code-of-Professional-Ethics.aspx). The project leader should enable active participation by regularly informing potential coauthors about the progress of the project from its early stage. The project leader should also make final co-authorship arrangements based on the real input of the individual contributors.

One representative of each EVA database will be invited as a co-author provided (1) s/he expresses an interest in this study by registering in the online EVA form; (2) the database will provide either at least 2% of the plots of total dataset or plots will be from a large area where almost no other plots are available. To be included on the final author list, the invited potential co-authors will need to contribute intellectually beyond the delivery of the data, e.g., by checking the species list and/or commenting on the concept of the analyses, interpretation of the results or the text of the manuscript.

• Eligibility of the applicant to receive EVA data. Specify to which EVA database the applicant has contributed; if the applicant is not the custodian or deputy custodian of an EVA database, give a name of a custodian or deputy custodian who supports this data request.

Alessandro Chiarucci is the custodian of the Alma Mater Studiorum Vegetation Database AMS-VegBank.

- I agree with the terms of EVA Data Property and Governance Rules as approved on 26 May 2012 (http://euroveg.org/download/eva-rules.pdf).
- In any result obtained based on this data, I will cite the EVA report paper (Chytrý et al. 2016; https://doi.org/10.1111/avsc.12191). In addition, I will cite individual source databases used in my project (if possible, in the list of References; if not possible, at least as a list of databases in the electronic supplementary material).
- If I ask for the plant trait data from TRY, I agree to invite to my project the TRY data contributors following the list received from the EVA database manager.

Bologna, 2022 November 15<sup>th</sup>

Alessandro Chiarucci