



Data Request Form

To obtain data from the European Vegetation Archive (EVA), please first make an enquiry to 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 Milan Chytrý (chytry@sci.muni.cz) or another member of the EVA Coordinating Board.

- Applicant's name:

Petr Bureš

- Applicant's institutional address:

Department of Botany and Zoology, <http://botzool.sci.muni.cz/en>, Masaryk University, Brno, Kotlarska 2, 611 37, Czech Republic

- Applicant's e-mail:

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- Project title:

Success of holocentric chromosomes: natural competition experiment on a global evolutionary scale

- Brief description of aims and methods of the study:

The study is a part of our project aimed on success of eukaryotic lineages with holocentric chromosomes. Holocentric chromosomes, as a structural alternative to monocentric chromosomes, have evolved independently many times in Eukaryotes. Since only advantageous traits originate repeatedly in evolution, the aim of our project is to reveal such an advantage of holocentrism which is only possible by comparing holo- to monocentrics. Unlike monocentric chromosomes, holocentric chromosomes tolerate fragmentation and, therefore, holocentric chromosomes should confer an advantage in environments causing chromosomal fragmentation. Globally present chromosome-breaking factor is UV-B radiation.

In this study, for which we request the data, we will analyze competitiveness, through local abundance as a proxy, of the largest holocentric clade of flowering plants (Cyperaceae+Juncaceae) relative to a very similar, but monocentric Poaceae on a spatial gradient of UV-B radiation. Based on plot-georeferences and UV-B radiation dataset (ufz.de/gluv; Beckmann et al. 2014), the UV-B radiation will be estimated for each analyzed plot and corrected for altitude. Data will be analyzed by multiple regression approaches, which will relate cover or relative cover of the holocentric species to UV-B, after correction for other possible confounding variables.

- Will someone else be involved in data editing or analysis in addition to the applicant?

Lubomír Tichý, František Zedek, Petr Šmarda

- Estimated time of delivery of results (e.g. manuscript submission):



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

Europe including Macaronesia (or Northern Africa if such extra-European plots are available in the EVA database)

- 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?

Yes, up to 20 km

- Vegetation types needed (syntaxa):

All vegetation types of non-woody or non-scrub vegetation, i. e., all plots in which the abundance of trees or shrubs is lower than 5% should be included in the dataset.

- Other data selection criteria:

- Envisaged publications:

One publication in a journal indexed in Web of Science

- 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. unique vegetation types, under-represented geographic areas) or make up more than 10% of the final dataset (5% threshold can be considered too). These database representatives should be experts in the topic of the project (they do not need to be the custodians or deputy custodians) and they 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 co-authors 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.

Petr Bureš or František Zedek will be the lead author of the publication, and will inform all data providers in key stages of the study. Co-authorship will be offered to one person for each database that contributed more than 10% plots included in the final dataset, i.e. after stratification and random removal of plots from oversampled areas. We expect that any co-authorship will be based on intellectual input to the paper beyond provision of the data; other data contributors or databases will be acknowledged in the paper. All the people who will participate in data processing and analyzing will be included among co-authors.

- 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.

Prof. Milan Chytrý (custodian of the database EU-CZ-001)



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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>).

[place, date] Brno, 20th January 2018

[applicant's name] Petr Bureš