



## Data Request Form

To obtain data from the European Vegetation Archive (EVA), please first make an enquiry to the EVA database administrator Iлона 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 Iлона or another member of the EVA Coordinating Board.

- Applicant's name:

Van Daele Frederik

- Applicant's institutional address:

Department of Biology; Kasteelpark Arenberg 31; box 2436; 3001 Leuven; Belgium

- Applicant's e-mail:

Frederik.vandaele@hotmail.com

- Project title:

Managing plant species translocations: using genomic tools to unravel interactions between adaptation to climate and adaptation to habitat fragmentation

- Brief description of aims and methods of the study:

The distribution data will be used for stratified sampling (dividing members of the population into homogeneous subgroups before sampling) in our research design which stretches over Europe. Furthermore, the data will be used to navigate to our selected *Primula elatior* populations. The data on *Primula veris* and *Primula vulgaris* is secondary to our research. It would be beneficial as an extra factor in the stratified sampling to determine if there was potential hybridization in the past. Potentially, the data will also be used to model the habitat suitability over Europe.

**Project specifics:** Assisted migration, or the deliberate translocation of individuals within (or beyond) the current distribution range of a species, has been proposed as a solution to mitigate the loss of adaptive potential caused by global change. Assisted migration is a frequently recommended conservation strategy, as the negative impacts of climate warming on population dynamics at northern species range limits are expected to be alleviated through the introduction of pre-adapted alleles from southern regions. Yet, the application of assisted migration remains controversial, due to many genetic issues related to potential outbreeding depression.

Aiming to provide one of the first empirical and genomic tests of the efficacy of assisted migration in landscapes of varying fragmentation levels, this project will use a large geographical sampling design throughout Europe, in concert with a quantitative genetic survey and ecologically-informed genome screening, in the True oxlip (*Primula elatior*).

The project involves genomic analyses and gene annotations to identify single nucleotide



## Data Request Form

polymorphisms (SNPs) that show shifts in allele frequencies with changing levels of fragmentation and with climate variation, together with a variety of translocation experiments.

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

Core members of the plant conservation and population biology group and members of the applicant's teams KU Leuven may assist in data analysis and interpretation as needed. Confidentiality in data use will be guaranteed.

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

2022

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

Europe (excluding North Africa and Turkey): 75° N, 30° E, 35° N, 15° W;

- 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?

500 metres is the minimum accuracy and relevés with precision not available

- Vegetation types needed (syntaxa):

All

- Other data selection criteria:

Specific observations of *Primula elatior*, *Primula veris* and *Primula vulgaris*.

- Envisaged publications:

3

- 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  $\delta^{15}\text{N}$ , 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 co-authors, 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. unique vegetation types,



## Data Request Form

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.

Data will be used for stratified sampling but will not be directly published. If data is used directly in any of the publications, Co-authorship will be offered to a representative of each database that will be represented in at least 5% of the relevés included in the final analyses. Additional persons who provide significant conceptual or analytic contributions may also be invited as co-authors. Following the EVA rules and established practices, we expect co-authorship to be associated with intellectual contribution to the paper, not merely with data.

- 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.

Els de Bie

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>).

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.

29 januari 2019, Leuven

Frederik Van Daele