

FWO DMP

DMP SEPPI: Standardized European monitoring of plant-pollinator interactions

ADMIN DETAILS

Project Name: FWO DMP - SEPPI: Standardized European monitoring of plant-pollinator interactions

Grant Title: 3E240168

Principal Investigator / Researcher: Hans Jacquemyn

Project Data Contact: hans.jacquemyn@kuleuven.be

Description: The major aim of this project is to develop and test automated detection and identification tools for floral-visiting insects. In a second stage of the project, we will apply these tools to plants and pollinators in the highly fragmented Westhoek Coastal Dunes in Belgium and test specific hypotheses about the role of landscape heterogeneity on plant-pollinator interactions.

Institution: KU Leuven

1. GENERAL INFORMATION

Name applicant

Hans Jacquemyn

FWO Project Number & Title

3E240168 - Biodiversa-SEPPI-Standardized European monitoring of plant-pollinator interactions

Affiliation

KU Leuven

2. DATA DESCRIPTION

Will you generate/collect new data and/or make use of existing data?

- Generate/collect new data

Describe the origin, type and format of the data (per dataset) and its (estimated) volume, ideally per objective or WP of the project. You might consider using the table in the guidance.

This multidisciplinary project will yield diverse datatypes, e.g. physical:

- Hardcopy notebooks: stored on-campus; researcher-only access
- Freeze-dried (retain) flower samples: stored at -20°C

- Observational data: written down in notebooks
- Insect samples: stored at room temperature in ethanol
- DNA extracts: stored at -80°C

Digital (preferably stored as open format (.csv, .txt, .tiff)):

- Sequencing data: converted to and stored as .FASTQ. Estimated volume (EV): 10 GB.
- Digitized results (e.g. pictures of flowers): stored as .jpg. EV: 10 GB.
- Summary tables and data sheets: stored as .csv. EV: 1GB
- R code: stored as .R. EV: 1 MB
- Papers: output will be stored as .doc and .pdf. EV: 1 GB

The answers to this section were checked by:

Question not answered

3. LEGAL & ETHICAL ISSUES

Will you use personal data? If so, shortly describe the kind of personal data you will use (add the reference to your file in your host institution's privacy register - not relevant yet)

- No

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? If so, add the reference to the formal approval by the relevant ethical review committee(s)

- No

Does your work possibly result in research data with potential for tech transfer and valorisation? Will IP restrictions be claimed for the data you created? If so, for what data and which restrictions will be asserted?

- No

Do existing 3rd party agreements restrict dissemination or exploitation of the data you (re)use? If so, to what data do they relate and what restrictions are in place?

- No

The answers to this section were checked by:

Question not answered

4. DOCUMENTATION & METADATA

What documentation will be provided to enable reuse of the data collected/generated in this project?

For each WP, the (e-)lab books will contain information on experimental design, sampling methodology, fieldwork, sampling location (GPS coordinates), variable-level detail, and all information necessary for a secondary analyst to use the data accurately and effectively. A clear coding for all data files related to the project will be used. These will have the form: WPX_TaskY_yyyymmdd_NameExperiment. In addition, templates for this documentation will be provided to all researchers associated to the project to allow consistent documentation.

Will a metadata standard be used? If so, describe in detail which standard will be used. If no, state in detail which metadata will be created to make the data easy/easier to find and reuse.

Metadata with experimental procedures (including sampling location, date and handling person, etc.), sampled species, preparation information, storage will be saved to read and interpret the data for other users in the future. Persons that perform the experiments and generate the data will document this information. In the data management system (openBIS ELN-LIMS), metadata are provided as attributes of the respective datasets. Based on the defined metadata scheme, openBIS ELN-LIMS will be configured so that the required metadata is automatically assigned to datasets and/or manually provided by the researcher.

The answers to this section were checked by:

Question not answered

5. DATA STORAGE & BACK UP DURING THE FWO PROJECT

Where will the data be stored?

The time-stamped master copy of the data will be kept on KU Leuven's central storage facility and Dropbox. In addition, copies will be made and kept on personal devices.

How is back up of the data provided?

The data is stored on the central servers of the university and these have automatic daily back-up procedures.

Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available then explain how this will be taken care of.

- Yes

What are the expected costs for data storage and back up during the project? How will these costs be covered?

None.

Data security: how will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

The access to the folder containing all project related data is restricted to the project researchers and access can only be granted by the project coordinator.

The answers to this section were checked by:

Question not answered

6. DATA PRESERVATION AFTER THE FWO PROJECT

Which data will be retained for the expected 5 year period after the end of the project? In case only a selection of the data can/will be preserved, clearly state the reasons for this (legal or contractual restrictions, physical preservation issues, ...).

KU Leuven policy on data management will be followed which entails a preservation term of 5 years. Sequencing data will be submitted to public databases, where they will be permanently archived to preserve access to the public. Other data accompanying published papers will be archived in repositories such as DRYAD, GBIF and Zenodo.

Freezer stocks will be maintained at -80°C in the lab for five years after conclusion of the project.

Where will the data be archived (= stored for the longer term)?

The data will be stored on external hard disks and the university's central servers (with automatic back-up procedures) for at least 5 years, conform the KU Leuven RDM policy.

What are the expected costs for data preservation during the retention period of 5 years? How will the costs be covered?

For external hard disks and most data repositories there are no extra costs. When submitting data to DRYAD, the one-time submission costs will be covered by the project's consumables.

The answers to this section were checked by:

Question not answered

7. DATA SHARING AND REUSE

Are there any factors restricting or preventing the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)?

No.

Which data will be made available after the end of the project?

All published data will be readily available. For unpublished data, these will be made available after an embargo period (3 years; exceptionally 5 years after the project).

Where/how will the data be made available for reuse?

Data repositories and data papers.

When will the data be made available?

Data will be made available either upon the publication of an article including the research results or after an embargo period.

Who will be able to access the data and under what conditions?

The data will be put in an open access repository and therefore anyone can access the data. Creative Commons Licenses (CC BY) will be attached to the data deposited to enable researchers to access, mine and reproduce our data.

What are the expected costs for data sharing? How will the costs be covered?

Since the aim is to share data via open access repositories, we do not expect to have any costs related to data sharing, except for DRYAD. In the latter case, costs will be covered by the project fund.

The answers to this section were checked by:

Question not answered

8. RESPONSIBILITIES

Who will be responsible for data documentation & metadata?

The PI (Dr.) Hans Jacquemyn and day-to-day manager of the project (Evan Taylor Sloan).

Who will be responsible for data storage & back up during the project?

The PI (Dr.) Hans Jacquemyn and day-to-day manager of the project (Evan Taylor Sloan).

Who will be responsible for ensuring data preservation and reuse ?

The PI (Dr.) Hans Jacquemyn and day-to-day manager of the project (Evan Taylor Sloan).

Who bears the end responsibility for updating & implementing this DMP?

The PI (Dr.) Hans Jacquemyn and day-to-day manager of the project (Evan Taylor Sloan).