

Arable Weeds and Management in Europe (AWME) database

Agreement on data hosting and sharing

As agreed on 22/10/2021

1. Status and purpose

The database Arable Weeds and Management in Europe (AWME) was initiated by the working group Weeds and Biodiversity of the European Weed Research Society (EWRS). It is a collection of vegetation-plot observations of weed vegetation taken in arable fields in Europe (and adjacent areas like Turkey), complemented by information on the management of the fields. The purpose of the data base is to facilitate the further use of these data for research.

2. Data contributions

New datasets can be contributed to AWME by their owners if they meet the minimum requirements: A dataset consists of species records taken on arable fields (or their cultivated margins) and is accompanied with at least basic information on management (e.g. crop) as well as geo-references. Normally, there should also be detailed information on the study methodology of the weed survey.

Datasets are contributed by a person who is the owner of the data, or an authorised representative of all dataset owners. This person is responsible for intellectual property rights and authorship rules in relation to the contributed dataset. The rights of individual dataset owners will not be affected by contributing data to AWME. It is expected that necessary data corrections will be done in the original datasets rather than AWME and an updated dataset be sent to AWME if necessary.

3. AWME governance

All dataset contributors are expected to decide together about the development of the AWME data base. There should be at least one yearly meeting, to discuss important issues. Changes of the database rules are made with a majority vote of dataset owners. Each person who is present at a meeting and an owner or a representative of a database has one vote, no regard whether there are multiple persons related to the same dataset or multiple datasets related to one person. Meetings can be held online, although a combination with an EWRS meeting would be preferable.

A coordinating group is responsible for the practical business, including data base hosting, technical development, data flow and management, handling of data requests, outside communication. This group consists of the custodian of the data base, a deputy, any dataset owners willing to take responsibility and technical staff of the hosting institution.

4. Data availability regimes

At the time of data submission or update, the dataset owners assign one of the following data availability regimes to the data contributed by them:

Regime 1: *Restricted-access data* are available for other dataset contributors only and their use depends on the permission of the respective dataset owner. These data remain the property of the dataset owner or a group of people represented by this person. The dataset owner must be contacted any time when there is a request to use these data. The terms of data use must be negotiated in each specific case.

Regime 2: *Semi-restricted-access data* are available for other dataset contributors only, but without the need for a specific permission in each single case. However, these data remain the property of the dataset owner or a group of people represented by this person. As such, the dataset owner will still be informed by the coordinating group for each data request, at least three weeks before the release of data. If no objection is raised during this time period, it will be assumed that the dataset owner has given the permission to use these data for the particular purpose.

Regime 3: *Free-access data* are available to a wider community of users. These data can be released based on the proposal to the coordinating group, with no need for special approval. The AWME initiative encourages a gradual transfer of data contributed to AWME from Regime 1 to Regime 3, but the decision on the regime is entirely upon the dataset owners. The dataset owners may, at any time, change the regime category of their data or withdraw their data from AWME.

5. Data requests and terms of data use

Researchers who would like to use the AWME data submit a proposal to the coordinating group describing the aims, basic methods and an approximate delineation of the data set they would require. With respect to data under Regimes 1 and 2 only proposals submitted by dataset owners who have contributed to AWME will be considered. Other persons who are not involved with AWME so far may ask for these data but their request needs to be supported beforehand by one of the AWME dataset owners.

The proposal should contain (1) the applicant's name and address, (2) the project title, (3) a brief description of aims and methods of the study, (4) the estimated time of delivery of results, e.g. manuscript submission, (5) a specification of the data needed (geographic area described as countries, counties or range of geographic coordinates or other selection criteria), (6) the envisaged publications, (7) a proposal how to handle the authorship in publications based on the data from AWME, (8) an explicit statement that the applicant agrees with these Rules.

Each proposal will be considered by the AWME coordinating group, which will check (1) whether the applicant is eligible to obtain data according to these Rules, and if so, (2) whether there is a reasonable link between the aims, expected outputs and data requested, and (3) whether these rules are respected.

The coordinating group will send the applicant the list of dataset owners who must be consulted about data availability and authorship arrangements. AWME will release the data to the authors of the proposal after receiving the approval from the respective dataset owners. The coordinating group will make efforts to deliver the data as fast as possible, but the speed of this service may be affected by the available labour force and funding. Upon data delivery the applicants should deliver the result (e.g. a manuscript ready for submission) to the AWME coordinating group within three years. After this time they lose their mandate to use the data.

Each paper using AWME data should be sent to the AWME coordinating group before submission for a check whether the data were used in accordance with these Rules. This check will not deal with the scientific quality of the manuscript and the group members will keep any information contained in the manuscript confidential.

The applicants are not allowed to pass any data obtained from AWME (including those under Regime 3) to third parties or use them for purposes other than stated in the original proposal. Data obtained from AWME can be used for research purposes only and the final product (publication, report) should contain a proper citation of the original data sources (or at least the main sources if there are

many sources) and of the AWME database. Recommended references will be provided by the AWME coordinating group.

The titles of projects that have received data from AWME, together with the names of applicants, can be published on the AWME website. The applicants will send the papers based on the AWME data to the AWME coordinating group upon their publication and links to these papers can be added to AWME website.

The applicants are encouraged to report any errors found in the data to the owners of the original datasets.

6. Authorship

Authorship of papers or reports based on AWME data under Regime 1 should be negotiated for each particular proposal between the applicant and those dataset owners of the data used in the project. The recommended good practice for the applicants is that they offer co-authorship at least to dataset owners whose data (1) account for more than 10% of the final dataset used in the particular project or (2) are particularly important for the project result. Becoming a co-author implies the possibility to contribute to the general concept of the product, data analysis and/or interpretation of the results. When in doubt, an inclusive, rather than a restrictive criterion should be applied.

Dataset owners representing a collective should handle any offer of co-authorship received via AWME according to the internal rules pertinent to the dataset.