

Report on the outcomes of a Short-Term Scientific Mission¹

Action number: CA18201

Grantee name: Renata Čušterevska

Details of the STSM

Title: Determining the conservation status of several important plants

Start and end date: 02.04.2023 to 09.04.2023

Description of the work carried out during the STSM

Short description:

The purpose of this STSM was to summarize the findings from the review of the draft assessments for 16 plant species at the national level. The review was conducted in collaboration with professor Andraž Čarni who reviewed the assessments for species that have a final status. The report includes an overview of the documents reviewed, comments made during the review, and recommendations for future research and the protection of endangered species.

Documents Reviewed:

The review covered the following documents for each of the 16 plant species:

Data Sheet: A detailed explanation of the plant's taxonomy, national and international distribution, habitat, threats, conservation measures, necessary research, etc.

Fact Sheet: All registered literary and herbarium sources, as well as data collected during field research (number of adult individuals per unit area, coordinates, threats, etc.).

Used Literature: A list of literature used in the assessments.

Distribution Maps: Maps indicating the distribution of the species.

Evaluation Proposal: A detailed explanation of the evaluation proposal for all criteria (the criterion with the highest category of concern was chosen as final).

¹ This report is submitted by the grantee to the Action MC for approval and for claiming payment of the awarded grant. The Grant Awarding Coordinator coordinates the evaluation of this report on behalf of the Action MC and instructs the GH for payment of the Grant.

Comments and Corrections:

During the review of the documents, comments were made for corrections and/or additions to some parts that the professor felt should be further explained. The comments were addressed and corrections were made to ensure the accuracy and completeness of the assessments.

Plant Species Reviewed:

The following 16 plant species were reviewed and their assessments: *Rindera graeca* (EN D), *Jurinea micevskii* (VU D1+D2), *Helichrysum zivojinii*, *Crocus cvjicii* (VU D2), *Centaurea soskae* (EN D), *Centaurea galicicae* (EN D), *Edraianthus horvatii* (LC), *Dianthus galicicae* (CR B1ab(iii) + CR B2ab(iii)), *Festuca galicicae* (LC), *Laserpitium ochridanum* (LC), *Sempervivum galicicum* (LC), *Alchemilla peristerica* (additional information is required), *Viola arsenica* (CR B1ab(iii) + 2ab(iii)), *Viola allchariensis* subsp. *Allchariensis* (EN B1ab(iii) + 2ab(iii)), *Thymus oehmianus* (CR B1ab(iii, v) + 2ab(iii, v)) and *Viola kosaninii* (VU D2)

Recommendations:

Based on the given recommendations, it can be concluded that certain criteria require additional research in order to improve the quality of the assessment in the future. Recommendations were also given for the protection of endangered species according to the experiences of more developed countries. Further research is needed to improve the quality of the assessments and ensure the effective conservation of the plant species.

Conclusion:

The review of the draft assessments for 16 plant species at the national level was thorough and detailed. The documents reviewed included data sheets, fact sheets, used literature, distribution maps, and evaluation proposals for all criteria. Comments and corrections were made to ensure the accuracy and completeness of the assessments. Recommendations were given for future research and the protection of endangered species. Overall, the review process helped to improve the quality of the assessments and ensure the effective conservation of the plant species.

Description of the STSM main achievements and planned follow-up activities

According to the detailed analysis of the attached evaluation documents and the recommendations given by the reviewer during this study stay, it can be noted that there is no change in the proposed evaluations for the species at this stage according to the available data. It is particularly significant that these are plants whose distribution is limited and small in the territory of Macedonia and coincides with the requirements of criterion B. The most common remarks are about the evaluation according to criteria A, C and E, where qualitative (A and C) and quantitative (E) data are required. For a large part of these criteria, there is no adequate data because we do not have specific information about the trend of the populations, as well as the state of the populations of the species in the future. The recommendation is that the current data on the number of adults be the basis for future research. It is necessary to monitor the populations, their numbers and trends in the future in order to get a more realistic picture of the endangered status of the species. For the reasons that for most of the considered species, there is no monitoring data on the state of the population and the trend of threats, it is necessary to establish monitoring areas with representative areas where the state of the populations of the species will be monitored on an annual basis. In this way, a good basis will be provided for revising/confirming the assessment at the National and regional level (4 of the species are national endemics, and the rest are stenoendemics that are also present in Albania and/or Greece – South Balkan endemics). In addition, special attention should be paid to the threats faced by the species and a prediction should be made based on thorough research on the threat from the impact of climate change.

Since a large part of the species are located in protected areas (Nature Reserve and National Parks – 14 species in total), in situ protection is relatively comprehensive and it is not expected that the species can increase their endangered status under anthropogenic influence. For these species, it is recommended to provide effective ex situ protection in the Botanical Garden which includes seed material and maintenance of vital populations. For Alshar s violets *Viola arsenica*, and *Viola allchariensis* subsp. *allchariensis* we were advised to take in situ and ex situ measures.

This year and next year I am involved in the project NATURA 2000, carried out on the territory of Macedonia, where the situation of 14 plant species from ANNEX 2 of the Habitats Directive is being studied. As a result of the established cooperation with prof. Andraž Čarni, we expect that the materials and the evaluation we will give to the species will be reviewed by him.