

## Final Evaluation Report

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Your Details	
<b>Full Name</b>	Armine Kosyan
<b>Project Title</b>	Assessment of the Conservation Value of Spiders in Armenia
<b>Application ID</b>	34689-1
<b>Date of this Report</b>	17.05.2022

**1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Getting new information about spiders in Armenia				Gathering spiders from different parts of Armenia, we received a lot of information about them. As a result of our research, we recorded one new genus of spiders and two new species for Armenia. This work will continue.
Create a collection of spiders in Armenia				The collection of spiders found in 2021-2022 was stored at the Department of Zoology of Yerevan State University. This work will continue.
Create a database of spiders of Armenia				The database of spiders (species, regions, location, date, habitat, vegetation type, and collector) is established. This work will continue.
Barcoding of some spiders				DNA was extracted from 50 spiders that were reliably identified. This work will be continued after identification of species.
Create a social science blog (International Society of Arachnology)				We created "Spiders of Armenia" social sites, where we spread information about spiders in Armenia. It allows us to interact with different people who are interested in spiders and to communicate, cooperate and exchange experience with specialists from foreign countries.
Enhancement of spider's studies (arachnology) in Armenia				In a very short time at Yerevan State University, we created a team of students who are interested in Armenian spiders.
Publication in a peer-reviewed scientific journal				One publication is published. However, the new publication for high rating journal is still in process
The raising of public awareness concerning the importance of protection of spiders and				Lectures, meetings and seminars were held for preschool institutions, schools and universities. The brochure for children was distributed among pre-school and secondary schools in the villages. The guide to spiders still needs to be

				prepared.
Using results for Ph.D. thesis				The results of the project will be used as part of my PhD thesis.

**2. Describe the three most important outcomes of your project.**

- a). The establishment of a collection of spiders and a database.
- b). Creation of a research group of students interested in spider research.
- c). Informing the general public about the richness and diversity of the spiders of Armenia.

The development and strengthening of spider research in Armenia will allow a better understanding of the nature and unique biodiversity of Armenia. this will protect rare species from extinction. At present, spiders are not listed in the Red Book of Armenia due to their low level of knowledge. I hope to create a base to fill in these gaps.

**3. Explain any unforeseen difficulties that arose during the project and how these were tackled.**

The main difficulties arose from the fact that spiders had not been studied before in Armenia, and I needed to create a new research environment and opportunities for doing this work. In particular, binoculars and a camera were purchased during the project, but many consumables and chemicals were also needed and had to be found and collected in the laboratory. Now I have all the necessary equipment and consumables, but the purchase process took time, which I could spend on identification of species.

**4. Describe the involvement of local communities and how they have benefited from the project.**

We organised eight seminars for pre-schoolers, schoolchildren and students. The course of lectures was listened by the students of Faculty of Biology, Yerevan State University and Faculty of Agroecology of the Anton Kochinyan College of the National Agrarian University of Armenia.

Several groups of children from the secondary school in the village of Mets Parni, Lori region participated in fieldwork where they studied spiders and received a brochure about them. A colourful brochure in Armenian was created for pre-schoolers. We mainly communicated with the pupils of the Yerevan kindergarten No. 18, but the brochure was distributed in different villages. Information about Armenian spiders was disseminated by the social platforms Facebook and Instagram. This allows the locals to better learn the benefits of spiders and not kill them when they meet.

**5. Are there any plans to continue this work?**

Systematics, ecology and conservation status of spiders are largely unexplored in Armenia. I have established the new facilities to study and fill the gaps in our knowledge about fauna of spiders, but it is time consuming and need in accumulation a large amount of information. This work will support the conservation of rare and endangered spiders, especially among endemic species.

**6. How do you plan to share the results of your work with others?**

Scientific publication is the main way to share information about scientific records and discoveries. One publication about the new genus in Armenia has already been published, and the next one about the diversity of the spider fauna in the Lori region of Armenia is in phase of preparation.

The social sciences are one of the main sources and beneficiaries of faunal research in the country. Therefore, the Facebook page "Spiders of Armenia" was created and maintained. Active work in iNaturalist, Spiders of the Caucasus and other Internet resources will increase interest towards to the spiders of Armenia.

**7. Looking ahead, what do you feel are the important next steps?**

N/A

**8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?**

An article has been published framework this program.  
Kosyan, Armine. 2022. "FIRST RECORDS OF GENUS ARGIOPE, FAMILY ARANAEDAE: ARGIOPE BRUENNICHII (SCOPOLI, 1772) AND ARGIOPE LOBATA (PALLAS, 1772) IN ARMENIA". Proceedings of the YSU B: Chemical and Biological Sciences 56 (1 (257):63-67. <https://doi.org/10.46991/PYSU:B/2022.56.1.063>

I have used logo on brochure "Spiders" for children.

**9. Provide a full list of all the members of your team and their role in the project.**

**Prof. Marine Arakelyan** helped me in organising fieldwork and lab work in Yerevan State University

**Dr. Stefan Otto** helped me a lot with methods and technics of identification of spiders. He supported me with scheme of preparing the collection and database and gave me

**Dr. Nils Hein** (coordinator of Cabol project) during his visit to Armenia and gave me special tweezers for working with the material conducted a training course on working with spiders

**Gohar Zhamkochyan** (Bachelor student of YSU) helped me with DNA extraction.

Masters and bachelor students: **Arevik Ghrmajyan, Zoya Xalalyan, Gayane Adamyanyan, Tatev Hayrapetyan, Hayk Hayrapetyan** and other students were involved in fieldwork and help in collecting of spiders.

Spider identification in the lab was chosen as part of a research component for eight second-year undergraduate students. I taught them the techniques and they identified some of them down to the species level and then presented them in their presentation at the research workshop. I hope that some of them will choose an arachnologist for their future research topic and my team will be increased.

#### **10. Any other comments?**

I want to thank The Rufford Foundation for supporting my work and advancing spider research in Armenia.