## Minutes of the Orthoptera meeting on 15.X.2021

## Eka Arsenashvili, Nils Hein, Shota Japarashvili (minutes), Arne & Gerlind Lehmann, Levan Mumladze

1. During their visit, Gerlind & Arne collected from various places in Georgia (approx. 200 specimen/samples). The collected material is now at Ilia State University and is further processed by a student assistant who works on grasshoppers. Approximately 35-40 species, some of them new to Gerogia. The CaBOL template is prefilled by Eka; Arne and Gerlind are currently completing the two sheets.

## Further identification:

- i) One option is to take high resolution pictures of the key features, which will allow for later determination. In a pre-test Eka has send pictures to Arne and Gerlind, which allowed proper determination. This will be the standard procedure for now.
- ii) Material unable to determine by pictures or in need of further examination will be resend to Gerlind and Arne for final determination. Additional experts will be involved for problematic cases (Thomas Stalling for Myrmecophilidae, Klaus-Gerhard Heller for some Tettigoniidae...)
- iii) Reverse or parallel identification via barcodes
- 2. Which specimens should be barcoded? Levan argues for 10 individuals per species. In line with this work plan Gerlind and Arne will mark the individuals in the two CaBOL lists for barcoding.
- 3. Further material will come from the ZMFK via Jana Thormann? and from Malaise trap samples via Eka? procedures for this need to be discussed next time
- 4. For some species CO1 will provide little information on the species status, so we should discuss what we should do with those species. What other markers can be used? This will be discussed during our next meeting, and is a top priority on the agenda, especially in exchange with Oliver Hawlitschek and Martin Husemann (LIB Hamburg)?

Especially the *Chortippus biguttulus*-group remains problematic. A combination of barcoding, morphometric and bioacustic work is needed, probably an interesting topic for a PhD student. Has to be further developed!

5. To gather more information about the Orthopterans of the Caucasus region to gain further literature (e.g. Russian) and ask for support with the identification of Orthopterans by Georgian students and CaBOL in general, Gerlind offered to write a report for the Metaleptea, issued by the Orthopteran Society

## 6. links to the CaBOL databases:

CaBOL webportal can be found here: https://ggbc.eu/data

To discuss these further steps in the next meeting the following people should also be invited: Jana Thorman (LIB Bonn), Oliver Hawlitschek (LIB Hamburg), George Japoshvili (AgrUni), Martin Husemann (LIB Hamburg)

Shota will organise the next meeting, which will be held either before 15th November or after 22th November 2021 – we noted the 23th for our next meeting? Can you provide the invitation soon?

P.S: Eka managed to take picture of 50 specimens and is preparing the excel sheet. Work is still in progress.