

Title: Spiders of Relict Forests in Georgia – A Dissertation Project

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Time: 15-20 minutes

Diploma thesis 2004

In 2004 I finished my diploma thesis. In this study I described the spider communities living in the tree canopies of primary forests in the woodland of Bialowieza in East Poland. I also compared the spider diversity of primary forests and managed forests in Bialowieza.

In Bialowieza I found 89 spider species in the tree canopies, of which 6 species were new to the region and one species (*Theridion palmgreni*) was a new record to Poland and Central Europe.

Spiders in the Caucasus

Since my first trip to Georgia I study the spiders of Georgia and the Caucasus. In 2006 I started the web page 'www.caucasus-spiders.info' with species lists for the Caucasus, Georgia, Armenia and Azerbaijan. All species lists can easily be viewed with a mouse-click and it is also possible to display all records of one species as points on a map as well as the literature sources of these records. This project is still in development and will regularly be updated.

The Caucasus is rich in spider species and includes many interesting and beautiful species [fotos: kibortshxala oboba, dzhvriani oboba, moxtunave oboba]. Determination of the number of species in the Caucasus is distributed across more than 200 single scientific studies. I put many of these in a database on the internet. Today we know 1002 species for the Caucasus region, 501 for Georgia, ... In the book of Tamara Mkheidze (1997), 362 species are listed for Georgia. So, during the last 10 years more than 100 species were recorded for Georgia for the first time.

One example: In 2004 I was on exkursion in Javakheti and collected one spider. It was determined as the species *Olios sericeus*, which is only known from Central Asia. So, it is very easy to record new species in the Caucasus because many species are not known in the Caucasus.

Research on Forests Spiders in Tree Canopies

The main focus of my studies and the institute in Wuerzburg are the spiders in the tree canopies. Spiders can be collected in the tree canopies by 1) hand collecting, 2) special traps between branches and leaves and 3) by canopy fogging (*insekticidis boli*). The fog kills the spiders and they fall onto plastic sheets under the tree.

Diversity of Forest Spiders

In the tropical rainforest the diversity of spiders is highest in primary forests (*bunbrivi tyeshi*) compared to managed forests. In another study in Poland (Bialowieza), the biodiversity in primary and managed forests was comparable. Now it is interesting to see, if the biodiversity of Tertiary relict forests is higher or lower than in tropical or temperate forests. It is also interesting to find out how diverse managed and primary forests are in Georgia.

Tertiary Relict Forests

There are two regions of Tertiary relict forest in the Caucasus – one in Kolkheti (Georgia) and one in Talysh (Azerbaijan). It is my plan to collect spiders in these forests for my dissertation study.

Words:

- Canopy – xis tsvero
- community – tsenozi, tanasazogadoeba
- primary forest – bunebrivi tye
- managed forests – xelovnuri tye