© Zool.-Bot. Ges. Österreich, Austria; download unter www.zobodat.at

Acta ZooBot Austria **155**, 2018, 233–237

Harvestmen (Arachnida: Opiliones) from the Vjosa valley in Albania

Christian Komposch

The small collection of harvestman material from the Vjosa River, from the vicinity of the village Kuta, revealed the presence of 3 species from 3 families: *Paranemastoma longipes*, *Opilio* cf. *parietinus* and *Nelima sempronii*. The harvestman fauna of Albania is poorly known. The finding of *Nelima sempronii* at the riversides of the Vjosa is the first record of this interesting species for Albania. The results of the present study, although based on random data, are a valuable contribution to the knowledge of the Opiliones fauna of this country. Furthermore, they emphasize the urgent need for further research as well as protection and conservation of this unique area at the Vjosa River, being seriously threatened by a proposed hydroelectric power dam.

Komposch Ch., 2018: Weberknechte (Arachnida: Opiliones) aus dem Vjosatal in Albanien.
Die Auswertung einer kleinen Aufsammlung an Weberknechten aus dem Vjosatal nahe der Ortschaft Kuta erlaubt das Vorlegen einer Artenliste von 3 Spezies aus 3 Familien: *Paranemastoma longipes*, *Opilio* cf. *parietinus* und *Nelima sempronii*. Die Weberknechtfauna Albaniens ist noch unzureichend bekannt. Der Honiggelbe Weberknecht (*Nelima sempronii*) wird hiermit erstmals für Albanien genannt. Obwohl die Ergebnisse dieser arachnologischen Untersuchung nur auf Streufunden basieren, sind sie ein wertvoller Beitrag zur Kenntnis der Weberknechtfauna dieses Landes. Zudem unterstreichen sie die Notwendigkeit weiterer Forschung und des Schutzes dieser einzigartigen Landschaft an der Vjosa, die durch energiewirtschaftliche Pläne ernsthaft bedroht ist.

Keywords: Harvestman, Opiliones, Arachnida, Albania, Vjosa river, pristine conditions, nature conservation.

Introduction

Harvestmen (Opiliones) are a popular arachnid order with a remarkable diversity of morphological appearance and biological pattern. Due to their general preference for humid environments, the majority of the species inhabit woods, forests, alpine areas and vegetation-covered, humid riversides.

The harvestman fauna of Albania is still poorly known. However, a checklist of recorded species and distribution maps are available (Mitov 2000).

Harvestmen were not collected specifically during this Vjosa field trip, and the focus of the pitfall-program lay on the extended gravel banks of the river. Therefore, the Opiliones material from this present study is quite poor. Nevertheless, the results derived from the analysis of these few specimens are worth being published. It is a small further contribution to the knowledge of Albanian harvestmen and should indicate the need for further research and the importance of conservation of the Vjosa river.

Material and Methods

The field work was conducted along the Vjosa River, in the vicinity of the village Kuta (Albania), in the period of 24.–28.04.2017. The not very extensive material was collected by hand at day and night (G. Kunz, H. Gunczy & W. Paill leg.). Two further juvenile

© Zool.-Bot. Ges. Österreich, Austria; download unter www.zobodat.at

phalangiids came from pitfall traps; due to the improper conservation solution for arachnids, this material was not usable any more.

Taxonomic identification of the harvestman specimens was conducted by the author by means of Martens (1978) and Schenkel (1947); Plamen Mitov confirmed *Paranemastoma longipes*. The material is deposited in the collection of Christian Komposch in Graz, Austria (Coll. OEKO).

Species list

Altogether, 3 species from 3 families were recorded.

1) *Paranemastoma longipes* (Schenkel, 1947), Nemastomatidae

Material: 1 ♂: On the way from Kuta to the Vjosa river; country lane in between a corrected creek and arable land; 40°27′52″ N, 19°45′40″ E, 55 m a.s.l., 23.4.2017, hand collecting at night, G. Kunz & H. Gunczy leg. 2 ♂♂: Vjosa river, WSW Kuta; ditch with softwood and *Typha* sp., silt or clayey silt; 40°28,319′ N, 19°45,297′ E, 48–52 m a.s.l., 25.4.2017, hand collecting, W. Paill leg.

The species is recorded from Bosnia, Herzegovina and Albania (Mitov 2000). Up to now it was known in Albania from just 4 localities. Due to the high variability and poor descriptions by C.-F. Roewer, this genus can be called a taxonomic nightmare.

Fig. 1: *Paranemastoma longipes* is characterised by its dorsal golden pattern and the male genital morphology. Photo: Gernot Kunz. – Abb. 1. *Paranemastoma longipes* ist durch seine goldene Rückenzeichnung und die männliche Genitalmorphologie charakterisiert. Foto: Gernot Kunz.

© Zool.-Bot. Ges. Österreich, Austria; download unter www.zobodat.at

2) *Opilio* cf. *parietinus* (De Geer, 1778), Phalangiidae

Material: 1 ♀: Kuta near Vjosa river; country lane near the village; 40°28′12″ N, 19°46′00″ E, 106 m a.s.l., 25.4.2017, hand collecting at night, G. Kunz & H. Gunczy leg.

The determination of *Opilio*-females is a challenge, especially in the Mediterraneis. Femur II of the collected female has a length of 9 mm. The mottling of the Coxae shows a dark distal spot and some smaller additional fluent mottles ("Wischer").

In Northern and Central Europe, *Opilio parietinus* is a synanthropic species. Due to the competition of the invasive neozoon *Opilio canestrinii*, this formerly frequent and widespread inhabitant of walls in urban areas has declined to a great extent and became lost regionally (Komposch 2009; S. Toft in litt.). Martens (1978) hypothesizes the primary area of *Opilio parietinus* in the Middle East and Central Asia. The populations in Albania could be part of the northern range of its primary area.

Fig. 2: In the past *Opilio parietinus* was a widly distributed and constantly occuring inhabitant of walls. Photo: Christian Komposch, ÖKOTEAM. – Abb. 2: Der Wandweberknecht (*Opilio parietinus*) war in der Vergangenheit ein weit verbreiteter und konstant auftretender Bewohner von Gebäudemauern. Foto: Christian Komposch, ÖKOTEAM.

3) *Nelima sempronii* Szalay, 1951, Sclerosomatidae

Material: 1 ♀: Vjosa riverbanks; moist, old branch of the Vjosa river; 40°27′31″ N, 19°44′41″ E, 52 m a.s.l., 26.4.2017, hand collecting at day, G. Kunz & H. Gunczy leg.

The collected female shows a body length of 5,8 mm.

The ecology and distribution of *Nelima sempronii* is still mysterious and hardly explainable. The ecological behaviour of this species has to be classified as diplo-stenoecious: in

© Zool.-Bot. Ges. Österreich, Austria; download unter www.zobodat.at

Central Europe, this hemihygrophilous harvestman inhabits both riversides and shady, humid-coolish microhabitats in our cultural landscape, and urban areas (Komposch & Gruber 2004). The evaluation of historic data should throw light on the assumed recent expansion of its area.

New to Albania!

Fig. 3: *Nelima sempronii* poses us a zoogeographical riddle concerning its origin. Photo: Christian Komposch, ÖKOTEAM. – Abb. 3: Der Honiggelbe Weberknecht (*Nelima sempronii*) gibt uns ein zoogeographisches Rätsel bezüglich seiner Herkunft auf. Foto: Christian Komposch, ÖKO-TEAM.

Discussion and conclusions

The present data are a first and random contribution to the harvestman fauna of the Vjosa river. In total, 3 species could be documented. Due to the new record of *Nelima sempronii*, the total number of harvestman species known from Albania is raised to 32. As a matter of fact, the presented data are incidental finds; along the Vjosa river, a total of 30 harvestman species can be expected. The entire harvestman fauna of Albania should comprise approx. 70 to 90 species. Further opilionological research is urgently required.

Up to now, the investigation area at the Vjosa river near Kuta is the only known locality of the riverside-species *Nelima sempronii* in Albania. For this reason and because of the high potential of rich harvestman coenoses, the protection and conservation of the Vjosa river as the last pristine and unspoilt river landscape in Europe is urgently called for.

© Zool.-Bot. Ges. Österreich, Austria; download unter www.zobodat.at

Acknowledgments

I would like to thank Hanna Gunczy, Gernot Kunz and Wolfgang Paill for providing the harvestman material and photos. Plamen Mitov helped with identification, Benjie Seamann with the correction of the English, Friedrich Schiemer and Rudolf Maier with editorial work. Thomas Frank and Wolfram Graf kindly coordinated this interdisciplinary project.

Literature

Komposch Ch., 2009: Rote Liste der Weberknechte (Opiliones) Österreichs. In: Zulka P. (Red.): Rote Listen gefährdeter Tiere Österreichs. Checklisten, Gefährdungsanalysen, Handlungsbedarf. Grüne Reihe des Lebensministeriums 14/3, 397 – 483.

Komposch Ch. & Gruber J., 2004: Die Weberknechte Österreichs (Arachnida: Opiliones). Denisia 12, 485 – 534.

Martens J., 1978: Spinnentiere, Arachnida: Weberknechte, Opiliones. In: Senglaub F., Hannemann H. J. & Schumann H. (eds.): Die Tierwelt Deutschlands 64, 464 S., Jena.

Mitov P., 2000: Contribution to the knowledge of the harvestmen (Arachnida: Opiliones) of Albania. Ekologia 19, 159 – 169.

Schenkel E., 1947: Einige Mitteilungen über Spinnentiere. Revue Suisse de Zoologie 54, 1 – 16.

Received: 2018 05 23

Address:

Mag. Dr. Christian Komposch, ÖKOTEAM – Institute for Animal Ecology and Landscape Planning, Bergmanngasse 22, 8010 Graz, Austria.
E-mail: c.komposch@oekoteam.at; Internet: www.oekoteam.at

© Zool.-Bot. Ges. Österreich, Austria; download unter www.zobodat.at

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien. Frueher: Verh.des Zoologisch-Botanischen Vereins in Wien. seit 2014 "Acta ZooBot Austria"

Jahr/Year: 2018

Band/Volume: 155_1

Autor(en)/Author(s): Komposch Christian

Artikel/Article: Harvestmen (Arachnida: Opiliones) from the Vjosa valley in Albania 233-237