Revue suisse de Zoologie 118 (2): 251-256; juin 2011

A new *Scutpelecopsis* Marusik & Gnelitsa from Romania (Araneae, Linyphiidae, Erigoninae)

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A new *Scutpelecopsis* Marusik & Gnelitsa from Romania (Araneae, Linyphiidae, Erigoninae). - A new species, *S. loricata* sp. n., is described from the southern Carpathians, Romania, differing from the two known congeners by details of the palp and epigyne conformation. All records of *Scutpelecopsis krausi* (Wunderlich, 1980) from the Caucasus actually refer to *S. wunderlichi* Marusik & Gnelitsa, 2009, thus the known distribution of *S. krausi* remains restricted to the type locality in Macedonia.

Keywords: Arachnida - dwarf spiders - new species - Carpathians.

INTRODUCTION

The genus *Scutpelecopsis* Marusik & Gnelitsa, 2009 was recently established for two species: the Caucasian *S. wunderlichi* Marusik & Gnelitsa, 2009, as the type species, and the Macedonian *S. krausi* (Wunderlich, 1980) (Marusik & Gnelitsa, 2009). A third congener, *S. loricata* sp. n., was found in the southern Carpathians, and its description is the subject of this paper.

The genus *Scutpelecopsis* now comprises three similar species, which differ from each other by small differences in palp and epigyne structure, as well as by the arrangement and dimensions of the abdominal scuta. The genus is closely related to *Pelecopsis* Simon, 1864, and its representatives are distinguished by a strongly armored body, as well as by the peculiar shape of the male palpal tibia and the ventral epigynal plate.

MATERIAL AND METHODS

This paper is based on the spider material collected by Ioan and Violeta-Alina Duma from the southern Carpathians, Romania in 2009-2010. Some comparative material from the Zoological Museum of the Moscow State University (Moscow, Russia) and the personal collection of Andrei Tanasevitch (Moscow, Russia) was examined.

Specimens, preserved in 70% ethanol, were studied using a Zeiss stereomicroscope. Close examinations of the palp and epigyne were made in glycerol using an

Manuscript accepted 03.09.2010

Olympus BX51 compound microscope with an Olympus E-330 digital camera. A camera lucida was used for the drawings. All measurements are given in mm. Scale lines in the figures correspond to 0.1 mm unless otherwise indicated.

The terminology of the male palpal tibia details follows that of Marusik & Gnelitsa (2009). A new terminology for the ventral abdominal scuta is proposed by us as more logical and related to their position on the abdomen.

Abbreviations used in the text and figures: AO - anterior tegular outgrowth, CAT - personal collection of Andrei Tanasevitch, DA - dorsal tibial apophysis, E - embolus, IA - intermediate tibial apophysis, ME - membranous edge, MM - median membrane, MS - mesal abdominal scuta, PO - posterior tegular outgrowth, PS - pedicel scuta, PVS - posteroventral scutum, RA - retrolateral tibial apophysis, TmI - position of trichobothrium on tibia I, VP - ventral plate, ZMMU - Zoological Museum of the Moscow State University.

All type material is without registration numbers and deposited in the Muséum d'histoire naturelle, Geneva, Switzerland.

Scutpelecopsis loricata sp. n. Figs 1-11

HOLOTYPE: ♂, Romania, Caras-Severin, Băile Herculane, Domogled Mountain, Cheile Feregari (44°51'59''N, 22°24'53''E), 350 m a.s.l., dry valley, under limestone rocks, hand collecting, 3.IV.2010, leg. I. Duma.

PARATYPES: 6 ♂, 4 ♀, same locality and date as for holotype. – 1 ♂, Caras-Severin, Dubova, Mraconia valley (44°37'55''N 22°16'55''E), 200 m a.s.l., 4.VII.2010, leg. I. Duma. – 1 ♀, Băile Herculane, Domogled Mountain, Cheile Feregari (44°51'59''N, 22°24'53''E), 359 m a.s.l., dry valley, under rocks, hand collecting, 14.V.2009, leg. V.-A. Duma.

ETYMOLOGY: The specific name, an adjective, translated from Latin as "iron-clad", refers to the strong body armor.

DIAGNOSIS: The new species is characterized by the strongly armored body in both sexes, as well as by the peculiar shape of the palpal tibia in male and the ventral plate of the epigyne in female.

DESCRIPTION: Male holotype. Total length 1.61. Carapace unmodified, as shown in Figs 1-2, with fine granulation, 0.67 long, 0.63 wide posteriorly. Sternum extended between coxae IV, 0.43 long, 0.42 wide posteriorly, with fine granulation. Chelicerae 0.26 long, anterior margin with five teeth, posterior one with two teeth. Stridulatory files fine. Labium wider than long. Legs brownish yellow, with darker femora. Length of leg segments, see Table 1.

Chaetotaxy: 1.1.1.1, length of spines about diameter of segment. Metatarsus IV without trichobothrium. TmI 0.31. Palp (Figs 5-8): Tibia with tree apophyses: dorsal one hook-shaped; retrolateral one flattened, slightly widened and concave terminally; intermediate apophysis small, triangular, flattened. Paracymbium simple, narrow, hook-shaped. Tegulum with an anterior conical outgrowth directed forward, as well as with a small outgrowth in posterior part directed backward. Median membrane large, funnel-shaped. Embolus thin, long and coiled, membranous edge narrow. Tuberculated outgrowth present, hidden by median membrane. Abdomen 1.10 long, 0.80 wide, dorsal scutum with fine granulation covering entire dorsal surface. Sigilla well visible. Abdomen ventrally covered with a large scutum extending from pedicel to spinnerets.

FIGS 1-4
Carapace of *Scutpelecopsis loricata* sp. n., ♂ holotype (1-2), ♀ (3-4). (1, 3) Dorsal view. (2, 4) Lateral view.

Female (from the type locality). Total length 1.94. Carapace unmodified, as shown in Figs 3-4, 0.76 long, 0.73 wide, dark brown to almost black, with fine granulation except on cephalic region. Sternum 0.41 long, 0.43 wide, dark brown, with sparse hairs. Chelicerae 0.23 long, anterior margin with five teeth, posterior one with two teeth. Stridulatory files fine. Chaetotaxy as in male, length of spines about diameter of segment. Metatarsus IV without trichobothrium. TmI 0.30. Length of leg segments, see Table 1.

Abdomen 1.37 long, 1.15 wide, dorsal scutum with fine granulation, covering almost entire dorsal surface. Anterior pair of sigilla well visible, posterior pair indistinct. Venter (Fig. 9) with a pair of pedicel scuta, a pair of large mesal scuta, as well as with an unpaired posteroventral scutum. Epigyne somewhat anchoriform, with long, weakly sclerotized lateral parts. Two round and weakly sclerotized depressions present on each side of base of ventral plate as shown in Fig. 10. Vulva as shown in Fig. 11.

VARIABILITY: All examined specimens do not differ in size and position of the intermediate tibial apophysis, number of teeth on the chelicerae, size and shape of scuta. Some differences exist in the body size: males vary from 1.61 to 1.7, females from 1.8 to 1.94.

TABLE 1. Length of leg segments in male and female (in parentheses) of *Scutpelecopsis loricata* sp. n.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	0.56 (0.56)	0.16 (0.15)	0.46 (0.44)	0.35 (0.36)	0.34 (0.34)	1.87 (1.85)
II	0.52 (0.55)	0.14 (0.14)	0.39 (0.39)	0.32 (0.32)	0.30 (0.31)	1.67 (1.71)
III	0.43 (0.46)	0.13 (0.13)	0.29 (0.33)	0.28 (0.30)	0.26 (0.27)	1.39 (1.49)
IV	0.61 (0.72)	0.16 (0.16)	0.52 (0.52)	0.38 (0.40)	0.32 (0.32)	1.99 (2.12)

TAXONOMIC REMARKS: The new species differs from the two known congeners by the longer embolus with a narrowing membranous edge, by the presence of a distinct anterior conical outgrowth, by small details of the male palpal tibia, as well as by the number of cheliceral teeth (5/2 versus 6/5 in others). *S. loricata* sp. n. is most similar to *S. wunderlichi*, but differs clearly by the smaller size and the position of the intermediate apophysis on the male palp: in the new species it is situated higher and closer to the dorsal tibial apophysis. The female of *S. loricata* sp. n., differs by the wider ventral plate of the epigyne, as well as by the length of the posteroventral scutum (b in Fig. 9): ca. 1/4 of the abdomen length instead of 1/3 as in *S. wunderlichi*, and by the distance between mesal scuta and posteroventral scutum: in *S. loricata* sp. n. this distance is about 1/2 of the length of the posteroventral scutum (a/b in Fig. 9), in *S. wunderlichi* it is much less, about 1/5-1/6).

The female of the new species clearly differs from that of *S. krausi* by having a scutum which covers the entire dorsal abdominal surface, whereas in *S. krausi* the dorsal scutum is developed as a large spot around the sigilla. The male of *S. loricata* sp. n. can be distinguished from that of *S. krausi* by the longer embolus and by the triangular shape of the intermediate tibial apophysis, which is truncate in *S. krausi*.

DISTRIBUTION: The new species is known from only two localities (close to each other) in Romania.

Scutpelecopsis wunderlichi Marusik & Gnelitsa, 2009

Pelecopsis krausi Wunderlich, 1980. – Tanasevitch, 1987: 360, misidentification, examined.– Tanasevitch, 1990: 58, 106, figs 23.8, 24.5, misidentification, examined.

Scutpelecopsis wunderlichi Marusik & Gnelitsa, 2009: 60, figs 1-11, 15-17, 20-26, 29-30, 35-43, 48-54, description ♂ & ♀, types not examined.

MATERIAL EXAMINED: Specimens previously determined as *S. krausi*, re-examined by A. Tanasevitch in 2010; 10 ♂, 4 ♀ (CAT), Russia, Caucasus, Republic of Severnaya Osetiya-Alaniya, S slope of Tsey Mt Ridge, 3-4 km E of Tsey Village, 2300 m a.s.l., burned-out *Pinus* forest, young *Pinus*, *Salix caprea*, tallgrass, 18.IV.-8.VI.1985, leg. S. Alekseev. – 1 ♂ (ZMMU), same locality, 2000 m a.s.l., *Pinus* with *Azalea*, 28.IX.1985, leg. S. Alekseev. – 1 ♂ (ZMMU), same locality, 3000 m a.s.l., alpine meadow, 28.IX.1985, leg. S. Alekseev. – 10 ♂, 4 ♀ (CAT), Caucasus, Georgia, Borzhomi District, Akhaldaba, 1000 m a.s.l., Nedzura River Valley, *Picea*, *Carpinus* & *Fagus* forest, litter, logs, 12.V.1983, leg. S. Golovatch. – 1 ♂ (ZMMU), Caucasus, Armenia, Shnokh Village (between Alaverdi & Bagratashen), 750 m a.s.l., *Carpinus* forest, 24.V.1987, leg. S. Golovatch & K. Eskov.

REMARKS: When describing *S. wunderlichi* from Abkhazia, Caucasus, Marusik & Gnelitsa (2009) noted that they have not seen the material of *Pelecopsis krausi* (now in *Scutpelecopsis*) reported by A. Tanasevitch from the Caucasus (Tanasevitch, 1987, 1990). This material is available in the Zoological Museum of the Moscow State

FIGS 5-8

Scutpelecopsis loricata sp. n., ♂ holotype. (5) Left palp, retrolateral view. (6) Same, prolateral view. (7) Same, ventral view. (8) Palpal tibia, dorsal view.

University and in the personal collection of Andrei Tanasevitch. Our examination of the material listed above has shown that all records of *S. krausi* from the Caucasus actually refer to *S. wunderlichi*, thus the known distribution of *S. krausi* is restricted to the type locality in Macedonia.

DISTRIBUTION: Caucasus: Armenia, Georgia, Republic of Severnaya Osetiya-Alaniya, Russia (Tanasevitch, 1987, 1990, under *Pelecopsis krausi*) and Abkhazia (Marusik & Gnelitsa, 2009).

RANGE: Caucasian.

ACKNOWLEDGEMENTS

We are indebted to Peter Schwendinger (Geneva, Switzerland) for valuable comments, corrections and help in preparing the final manuscript. We would also like

FIGS 9-11

Scutpelecopsis loricata sp. n., ♀. (9) Abdomen, ventral view. (10) Epigyne, ventral view. (11) Vulva, ventral view.

to thank Jörg Wunderlich (Hirschberg, Germany), Yuri Marusik (Magadan, Russia) and Christo Deltshev (Sofia, Bulgaria) for their comments on earlier drafts of the manuscript. For collecting some of the material used here we thank Violeta-Alina Duma.

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