

***Araeoncus tauricus* sp.n.: a new spider species (Araneae: Linyphiidae) from the Crimea, Ukraine**

***Araeoncus tauricus* sp.n.: новый вид пауков (Araneae: Linyphiidae) из Крыма, Украина**

**V.A. GNELITSA
В.А. ГНЕЛИЦА**

A.S. Makarenko's Sumy State Teachers Training University, Romenskaya Street 87, Sumy 40022, Ukraine.
Сумской государственной педуниверситет им А.С.Макаренко, ул. Роменская 87, Сумы 40022, Украина.

ABSTRACT. The new linyphiid species, *Araeoncus tauricus* sp.n. from the Crimea is described and illustrated.

РЕЗЮМЕ. Приводится иллюстрированное описание нового вида линифид *Araeoncus tauricus* sp.n. из Крыма.

KEY WORDS: *Araeoncus tauricus* sp.n., Linyphiidae, new species.

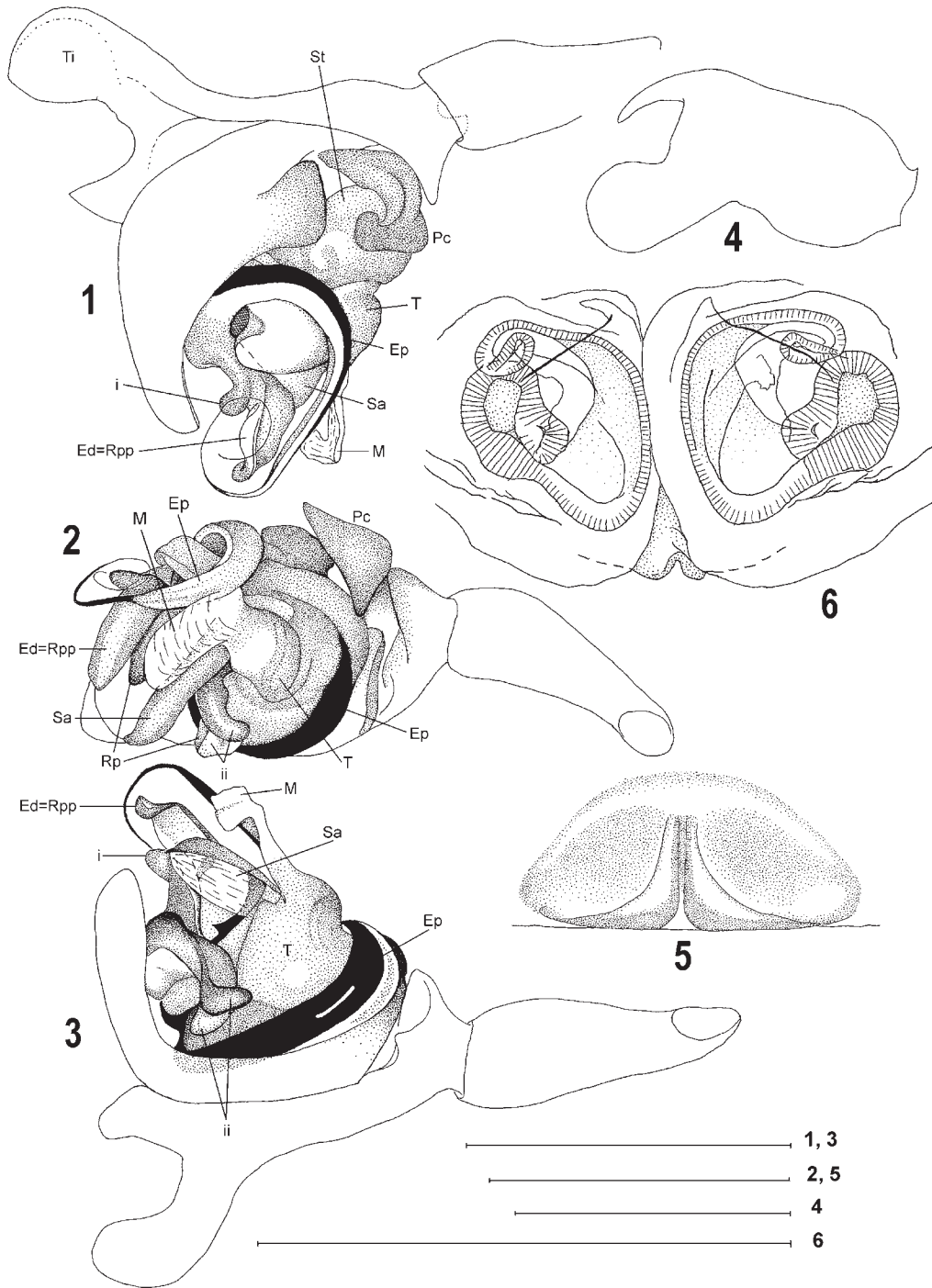
КЛЮЧЕВЫЕ СЛОВА: *Araeoncus tauricus* sp.n., Linyphiidae, новый вид.

Introduction

The spider genus *Araeoncus* Simon, 1884 currently includes 33 valid species [Platnick, 2002] with an Afro-Palaeartic distribution. Fifteen Eurasian species of *Araeoncus* are restricted to the Mediterranean, namely *A. altissimus* Simon, 1884, *A. anguineus* (L. Koch, 1869), *A. caucasicus* Tanasevitch, 1987, *A. clavatus* Tanasevitch, 1987, *A. clivifrons* Deltshv, 1987, *A. crassiceps* (Westring, 1861), *A. discedens* (Simon, 1881), *A. galeriformis* (Tanasevitch, 1987), *A. hanno* Simon, 1884, *A. humilis* (Blackwall, 1841), *A. longiusculus* (O. Pickard-Cambridge, 1875), *A. martinae* Bosmans, 1996, *A. sicanus* Brignoli, 1979, *A. toubkal* Bosmans, 1996 and *A. vaporariorum* (O. Pickard-Cambridge, 1875) [see Simon, 1926; Brignoli, 1979; Deltshv, 1987; Tanasevitch, 1987; Tanasevitch, 1990; Heimer & Nentwig, 1991; Pesarini, 1996; Bosmans, 1996].

The Caucasian specimens of *A. altissimus* differ from the North African ones in the structure of the male palp [see Bosmans, 1996]. Therefore, in this paper the Caucasian specimens are treated as *A. altissimus sensu* Tanasevitch. A detailed comparison of the *Araeoncus* specimens found in the Crimea with the morphologically close *A. altissimus sensu* Bosmans, 1996, *A. altissimus sensu* Tanasevitch and *A. toubkal* demonstrated that the Crimean specimens belonged to a new species.

Terms for separate palpal sclerites were adopted from Merrett [1963], with some changes according to Millidge [1977] and some corrections by Tanasevitch [1987]: Ed = embolic division [*sensu* Tanasevitch, 1987]; Ep = embolic part; M = membrane; Pc = paracymbium; Rpp = process of radix [*sensu* Merrett, 1963]; Sa = suprategular apophysis; St = subtegulum. Other abbreviations used in the text are: Fe = femur; Pt = patella; Ti = tibia; Mt = metatarsus; Ta = tarsus; Tm = position of the metatarsal trichobothrium. All measurements are in mm.



Figs 1–6. *Araeoncus tauricus* sp.n. 1–3 — male palp, lateral, ventral and median views; 4 — palpal tibia, dorsally; 5 — epigyne, ventral view; 6 — spermataecae. Scale: 0.1 mm.

Рис. 1–6. *Araeoncus tauricus* sp.n. 1–3 — палпы самца, вид сбоку, вентрально и медтально; 4 — бедро пальпы, дорзально; 5 — эпигина, вид снизу; 6 — сперматека. Масштаб: 0,1 мм.

Description

Araeoncus tauricus sp.n.

Figs 1–10.

MATERIAL. Holotype: ♂ (Zoology Department of the Sumy Teachers Training University), Ukraine, the Crimea, canyon of the Chornaya river, in dead grass near water, 22.04.2001, V. Gnelitsa.

Paratypes: 1 ♂, 2 ♀♀ (Zoology Department of the Sumy Teachers Training University), together with the holotype.

ETYMOLOGY. The species was named after the ancient name of the Crimean Peninsula, where the type series was collected.

DIAGNOSIS. By the structure of the male palpal tibia and of the embolic division, *A. tauricus* sp.n. is most similar to *A. altissimus*, *A. altissimus sensu* Tanasevitch and *A. toubkal*. Based on the similarity of the male copulatory organs, these four species can be united into the *altissimus* species group. The male of *A. tauricus* sp.n. differs from all of them in having a greater total body length, as well as by the following genitalic characters: (1) palpal tibia considerably larger; (2) the presence of the projection (i) on the radix at the embolic base (Figs 1, 3); (3) the presence of the complex appendix (ii) of the radix (Fig. 3); (4) shape of the palp membrane is clearly different (Figs 1–3).

For the reliable separation of *A. tauricus* sp.n. and *A. altissimus*, which are most similar in the structure of the male palp, one needs additional figures of the ventral and mesal views of the palp; both lacking in Bosmans [1996].

Details of the epigyne of the members of the *altissimus* group do not allow reliable species identification. In the structure of the vulva, *A. tauricus* sp.n. is closest to *A. altissimus* and *Araeoncus* sp. from Bulgaria [see Deltshv, 1987], although it differs from both of these species and from *A. toubkal* in the shape of the receptacle and the position of the ducts of the vulva. The female of *A. altissimus sensu* Tanasevitch is unknown.

REMARKS. According to my observations, carapace shape seems to be a distinctive feature between species within the *altissimus* group (see Figs 7–10). However, this character is not included in the diagnosis because the shape of the carapace (especially its anterior lobe) can vary over a wide range (cf. *A. altissimus* in Bosmans [1996] and Pesarini [1996]). On the other hand, the species evidently resembling each other in male palpal structure (e.g., *A. caucasicus* and *A. discedens*) have carapaces of similar shape [Tanasevitch, 1987; Bosmans, 1996].

DESCRIPTION. MALE. Total length 3.25. Carapace: length 1.85; width 1.00; dark brown, front

part slightly lighter (Figs 7, 8). Sternum: length 1.32; width 1.10; dark brown, with darker margins. Eyes: relatively small, posterior median eyes separated by three times their diameter. Legs: yellow; tibial spines 2:2:1:1; spines on TiI and TiII are barely visible and considerably shorter than the diameter of the tibia; spines on TiIII and TiIV are longer than the diameter of the tibia. TmI 0.58; TmIV absent.

Legs	Fe	Pt	Ti	Mt	Ta
I	1.10	0.35	0.88	0.80	0.53
II	1.08	0.35	0.81	0.77	0.52
III	0.92	0.29	0.64	0.72	0.42
IV	1.29	0.31	1.04	1.08	0.53

Abdomen: uniform dark grey. Palpal structure as in Figs 1–4.

FEMALE. Total length 2.98. Carapace: length 1.33; width 1.05; grey-brown (Figs 9, 10). Sternum: length 0.77; width 0.64; grey-brown, with darker margins. Eyes: larger than in males, posterior median eyes are separated by one diameter. Legs: yellow; tibial spines 2:2:1:1; tibial spines are equal to or longer than the diameter of the tibia. TmI 0.53; TmIV absent.

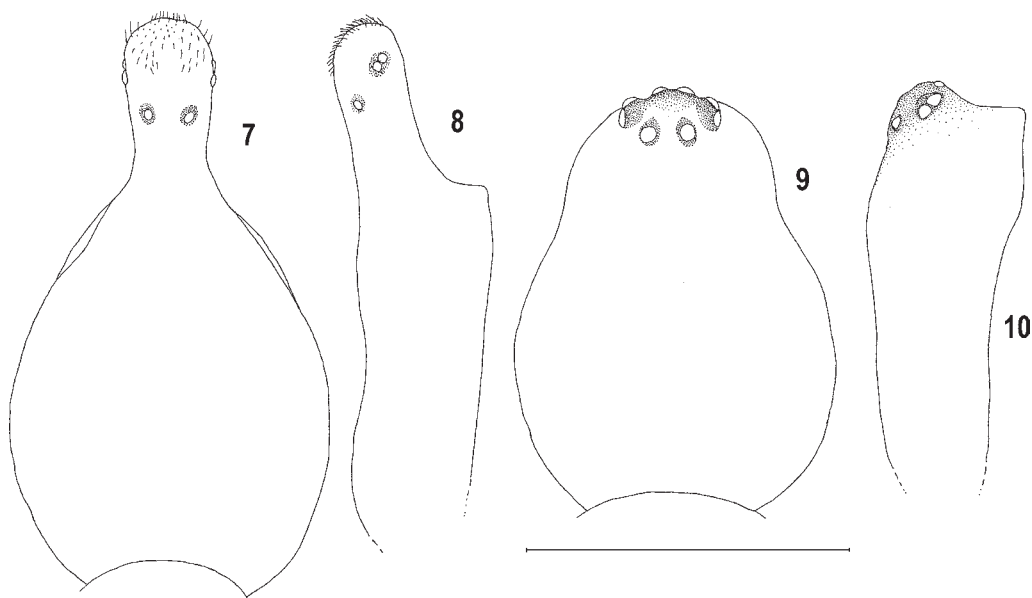
Legs	Fe	Pt	Ti	Mt	Ta
I	1.10	0.36	0.97	0.91	0.56
II	1.06	0.36	0.88	0.85	0.53
III	0.91	0.32	0.77	0.80	0.45
IV	1.20	0.35	1.06	0.98	0.56

Abdomen: uniform brown-grey. Epigyne as in Fig. 5; spermathecae as in Fig. 6.

ACKNOWLEDGEMENTS. I am very much obliged to Dr. P. Pantini (Museum of Natural Science; Bergamo, Italia), Dr. C. Pesarini (Museo Civico di Storia Naturale; Milano Italia) and Dr. C. Deltshv (Institute of Zoology; Sofia, Bulgaria) for providing me with their papers, which were essential for this study. Dr. D. Penney (University of Manchester, UK) is thanked for improving the English of the final draft.

References

- Bosmans R. 1996. The genera *Araeoncus* Simon, *Delorripis* Simon and *Diplocephalus* Bertkau in northern Africa (Araneae: Linyphiidae: Erigoninae): Studies on North African Linyphiidae VII // Belg. J. Zool. Vol.2126. P.123–151.
- Brignoli P.M. 1979. Ragni d'Italia XXXII. Specie cavernicole di Sicilia (Araneae) // Animalia. No.5. P.273–286.
- Deltshv C.D. 1987. A critical review of genus *Araeoncus* Simon in Bulgaria, with description of a new species (*Araeoncus clivifrons* sp.n.) (Arachnida, Araneae, Erigonidae) // Reichenbachia. Bd.25. S.97–102.



Figs 7–10. *Araeoncus tauricus* sp.n. 7 — male carapace, dorsally; 8 — ditto, laterally; 9 — female carapace, dorsally; 10 — ditto, laterally. Scale: 0.1 mm.

Рис. 7–10. *Araeoncus tauricus* sp.n. 7 — карапакс самца, дорзально; 8 — то же, латерально; 9 — карапакс самки, дорзально; 10 — то же, латерально. Масштаб: 0,1 мм.

- Heimer S. & Nentwig W. 1991. Spinnen Mitteleuropas: Ein Bestimmungsbuch. Berlin: Verlag Paul Parey. 543 p.
- Merrett P. 1963. The palpus of male spiders of the family Linyphiidae // Proc. Zool. Soc. Lond. Vol.140. P.347–467.
- Millidge A.F. 1977. The conformation of the male palpal organs of linyphiid spiders, and its application to the taxonomic and phylogenetic analysis of the family (Araneae: Linyphiidae) // Bull. Br. Arachnol. Soc. Vol.4. P.1–60.
- Pesarini C. 1996. Note su alcuni Erigonidae italiani, con descrizione di una nuova specie (Araneae) // Atti Soc. Ital. Sci. Nat. Mus. Civ. Stor. Nat. Milano. Vol.135. P.413–429.
- Platnick N.I. 2002. The World Spider Catalog, Version 3.5. The American Museum of Natural History. The Linyphiidae page last updated December 25, 2002. <<http://research.amnh.org/entomology/spiders/catalog81-87/index.html>>
- Simon E. 1926. Les Arachnides de France, 2. Paris. Vol.6. P.309–532.
- Tanasevitch A.V. 1987. The linyphiid spiders of the Caucasus, USSR (Arachnida: Araneae: Linyphiidae) // Senckenbergiana Biol. Bd.67. Hft.4/6. S.297–383.
- Tanasevitch A.V. 1990. The spider family Linyphiidae in the fauna of the Caucasus (Arachnida, Aranei) // Striganova B.R. (ed.). Fauna nazemnykh bespozvonochnykh Kavkaza. Moscow: Akademia Nauk. S.5–114 [in Russian].