

New data on *Aituaria pontica* (Spassky, 1932) (Aranei: Nesticidae)Новые данные о *Aituaria pontica* (Spassky, 1932)
(Aranei: Nesticidae)Sergei L. Esyunin
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Пермский государственный университет, ул. Букирева 15, Пермь 614600 Россия.KEY WORDS: cave cobweb spiders, *Aituaria*, distribution, new synonym.КЛЮЧЕВЫЕ СЛОВА: пауки нестициды, *Aituaria*, распространение, новый синоним.

ABSTRACT. The genus *Aituaria* Esyunin et Efimik, 1998 is redefined as monotypic. It is close to the predominantly Caucasian *borutzkyi* species group of the genus *Carpathonesticus* Lehtinen et Saaristo, 1980, but can easily be distinguished from it by the broad, ribbon-shaped embolus notched at its tip, as compared to the narrow, tapering off embolus in the *borutzkyi* species group. The species *Aituaria nataliae* Esyunin et Efimik, 1998 is synonymized with *A. pontica* (Spassky, 1932). *A. pontica* is reported from the Middle Urals for the first time, its male palp is illustrated and distributional and ecological data are also summarized.

РЕЗЮМЕ. Род *Aituaria* Esyunin et Efimik, 1998 признан монотипическим. Он близок к преимущественно кавказской группе видов *borutzkyi* рода *Carpathonesticus* Lehtinen et Saaristo, 1980, но хорошо отличается от нее широким лентообразным с выемкой на вершине эмболюсом, в сравнении с узким суженным к вершине эмболюсом у группы видов *borutzkyi*. Вид *Aituaria nataliae* Esyunin et Efimik, 1998 синонимизирован с *A. pontica* (Spassky, 1932). *A. pontica* впервые указывается для Среднего Урала, пальп самца проиллюстрирован, а также обобщены данные о распространении и экологии вида.

Introduction

The spider genus *Aituaria* Esyunin et Efimik, 1998, with the type species *A. nataliae* Esyunin et Efimik, 1998, was described by Esyunin and Efimik [1998] on the basis of a single male collected from the southern Urals. The second species of the genus, *A. pontica* (Spassky, 1932) from Krasnodar Province and the Caucasian coast of Black Sea was transferred by the same authors from the genus *Nesticus* Thorell, 1869. Thus, currently the genus *Aituaria* consists of two species [WSC, 2017].

Recently, additional *Aituaria* specimens have been collected from the City of Perm (Russia). Having examined them, the author has come to the conclusion that *A. nataliae* and *A. pontica* are to be considered conspecific. The main aims of this paper are (1) to synonymize both species names, (2) to illustrate important diagnostic characteristics of the male palp, and (3) to provide new distributional and ecological data for *A. pontica*.

Material and methods

SEM micrographs were made by means of a Hitachi TM3000 SEM microscope with BSE (back-scattered electrons) at the Perm State University.

The material treated in the present paper is deposited in the collections of the Zoological Museum of the Perm State University (PSU, curator: S.L. Esyunin).

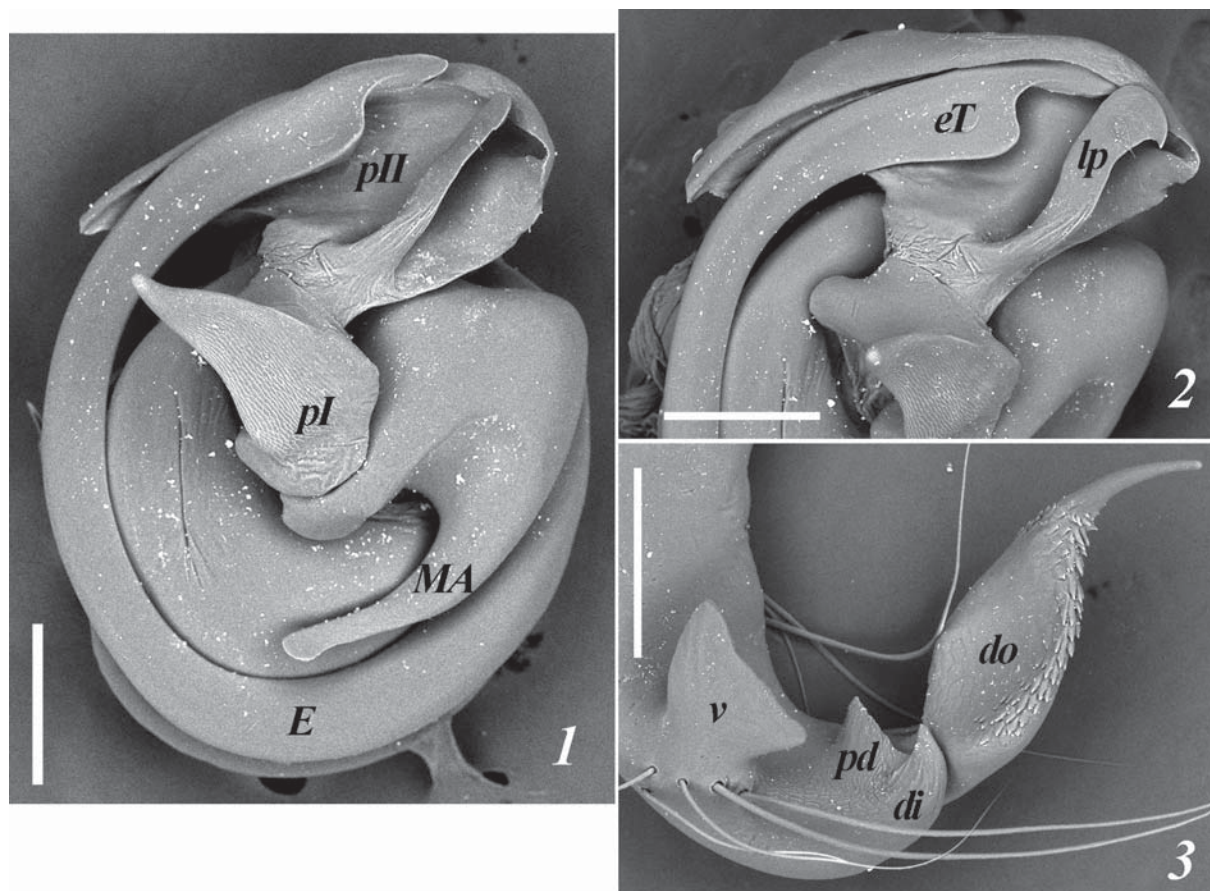
The terminology of the nesticid palp follows Lopez-Pancorbo, Ribera [2011] and Pavlek, Ribera [2017].

Systematic part

Genus *Aituaria* Esyunin et Efimik, 1998

TYPE SPECIES. *Nesticus ponticus* Spassky, 1932; as the senior synonym of *Aituaria nataliae* Esyunin et Efimik, 1998.

DIAGNOSIS. The genus *Aituaria* is close to the *borutzkyi* species group of the genus *Carpathonesticus* Lehtinen et Saaristo, 1980, of which five species are distributed in the Caucasus and the Ciscaucasia Region, viz.: *C. birsteini* (Charitonov, 1947), *C. borutzkyi* (Reimoser, 1930), *C. caucasicus* (Charitonov, 1947) and *C. zaitzevi* (Charitonov, 1939), as well as *C. ljo-vuschkini* (Pichka, 1965) which is known from the female but yet suits the diagnosis of the *borutzkyi* species group by Lehtinen, Saaristo [1980]. In my opinion, two other species from Georgia — *C. mamajevae* Marusik, 1987 and *C. eriashvili* Marusik, 1987 —



Figs 1–3. Diagnostic characters of the male palp of *Aituaria pontica* (Spassky, 1932): 1 — bulbus, 2 — process II of the theridioid tegular apophysis and embolic tip, 3 — paracymbium tip, all ventral views. Abbreviations: *di* — distal process; *do* — dorsal process; *E* — embolus; *eT* — embolic tip; *lp* — lamellar process of the process II; *MA* — median apophysis; *pI* and *pII* — process I and II of the theridioid tegular apophysis, respectively; *pd* — paradistal process; *v* — ventral process. Scale 0.2 mm.

Рис. 1–3. Диагностические признаки пальца самца *Aituaria pontica* (Spassky, 1932): 1 — бульбус, 2 — отросток II теридиодной тегулярной апофизы и вершина эмболюса, 3 — вершина парацимбиума, все вид снизу. Аббревиатура: *di* — дистальный отросток; *do* — дорсальный отросток; *E* — эмболюс; *eT* — вершина эмболюса; *lp* — пластинчатый отросток *pII*; *MA* — срединная апофиза; *pI* и *pII* — отростки I и II теридиодной тегулярной апофизы, соответственно; *pd* — парадистальный отросток; *v* — вентральный отросток. Масштаб 0,2 мм.

have little in common with true members of the *borutzkyi* species group and seem to compose a separate species group. The common characteristics of the male palp both in *Aituaria* and in the aforementioned species of the *borutzkyi* species group are as follow: (1) the paracymbium with dorsal, ventral and paradistal processes, but without the “barbed part” [Lehtinen, Saaristo, 1980]; (2) the protruding process I of the theridioid tegular apophysis more or less triangular in shape; (3) the process 2 of the theridioid tegular apophysis with a narrow lamellar process; and (4) the trapezoid median septum of the epigyne. However, *A. pontica* differs from all species of the *borutzkyi* group in having (1) the broad ribbon-like embolus notched at its tip (Figs 1–2), as compared to the narrow, tapering off embolus in that species group [Charitonov, 1941: Fig. 1, 3; Wiehle, 1963: Fig. 5–6; Pichka, 1965: Fig. 2a; Marusik, 1987: Fig. 1; Nadolny, Kovblyuk, 2007: Fig. 2] and (2) the distal process of the paracymbium

(Fig. 3), which is absent from the species of the *borutzkyi* species group.

DESCRIPTION. See Esyunin and Efimik [1998: 147].

COMPOSITION. *Aituaria pontica* (Spassky, 1932).

Aituaria pontica (Spassky, 1932)

Figs 1–3.

Nesticus ponticus Spassky, 1932: 975, Figs 1–8 (♂♀).

Nesticus ponticus: Charitonov, 1947: 19, Figs 3–5 (♂♀).

Carpathonesticus ponticus: Mikhailov, 1996: 80 (from *Nesticus*).

Nesticus ponticus: Mcheidze, 1997: 293, Figs 678–680 (♂♀).

Aituaria pontica: Esyunin, Efimik, 1998: 147, Fig. 3 (♀; from *Carpathonesticus*).

Aituaria natali Esyunin, Efimik, 1998: 147, Figs 1–2, 4–7 (♂♀). **Syn.n.**

MATERIAL. 1 ♂, 2 ♀♀, 1 juvenile (PSU-6389), City of Perm, sewage header, 17.01.2013, N.N. Pan'kov. For other materials studied see in Esyunin, Efimik [1998].

DESCRIPTION. See Esyunin, Efimik [1998: 147; sub *A. pontica* and *A. natali*].

DISTRIBUTION. The Crimea: Sevastopol, 44° 36'N, 33°32'E [Nadolny, Turbanov, 2014; Kovblyuk, Kastrygina, 2015]. Krasnodar Province: Sochi, 43°31'N, 39°52'E, Verkhne-Mzymtinskaya cave (Mzymta River), 43°34'N, 40°37'E [Spassky, 1932; Charitonov, 1947; Pichka, 1965; Mcheidze, 1997; Esyunin, Efimik, 1998]. Orenburg Area: Aituar [Esyunin, Efimik, 1998]. Perm Province: Perm [present data]. Eastern Ukraine: Chernivtsi [Marusik, pers. comm.]. The record of *A. pontica* from Tarkiladze Cave (Duripsh, Abkazia), 43°12'N, 40°38'E [Charitonov, 1947: 19] seems to belong to another species, as the latter author noted that the female deviated “significantly from the typical form”.

ECOLOGY [Spassky, 1932; Pichka, 1965; Mcheidze, 1997; Esyunin, Efimik, 1998; Nadolny, Turbanov, 2014]. In the Crimea and Krasnodar Province, *A. pontica* dwells both in natural caves, and in similar anthropogenic habitats (wine cellars, mines, etc.); in the Urals (Orenburg Region, Perm City), it is a synanthropic species. In Perm Area, where the cave fauna has been specially explored [e.g., Pan'kov et al., 2009], the species was not found in natural caves. Phenology: ♂♂ — IX–III, ♀♀ — VII–III, juveniles — VII–III.

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