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Taxonomic notes on *Amaurobius* (Araneae: Amaurobiidae), including the description of a new species

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Abstract

A new species, *Amaurobius caucasicus* **sp. n.**, is described based on the holotype male and two male paratypes from Eastern Georgia. A similar species, *A. hercegovinensis* Kulczyński, 1915, known only from the original description is redescribed. The taxonomic status of *Amaurobius* species considered as *nomina dubia* and species described outside the Holarctic are also assessed. *Amaurobius koponeni* Marusik, Ballarin & Omelko, 2012, **syn. n.** described from northern India is a junior synonym of *A. jugorum* L. Koch, 1868 and *Amaurobius yanoianus* Nakatsudi, 1943, **syn. n.** described from Micronesia is synonymised with the titanoecid species *Pandava laminata* (Thorell, 1878) a species known from Eastern Africa to Polynesia. Considerable size variation in *A. antipovae* Marusik et Kovblyuk, 2004 is briefly discussed.

Key words: Aranei, Asia, Caucasus, Georgia, Kakheti, misplaced, new synonym, *nomen dubium*, redescription

Introduction

Amaurobius C.L. Koch, 1837 with 67 named extant species is the largest genus of the family encompassing 276 species (WSC 2019). Currently six species of *Amaurobius* are considered *nomina dubia*. Besides extant species there are four fossil species described from Baltic amber (Wunderlich 2004). All fossil species seem to be misplaced both in the genus and family and belong to *Eomatachia* Petrunkevitch, 1942 considered in Zoropsidae instead (Wunderlich 2004). Most of the valid recent *Amaurobius* species (62) are known from the Holarctic, two species are described from South America, one species is known in Africa, India and from Micronesia (WSC 2019). Judging from their original descriptions, these four species are know from a single taxonomic entry and seem misplaced on family level. So far, 24 species are known from the Nearctic, and 23 of them are endemics of the region. Among two other species one (*A. similis* Blackwall, 1861 from Alaska) was most likely mislabeled or introduced, and another one (*A. ferox* (Walckenaer, 1830) was most likely introduced (Paquin *et al*. 2010). Although the Nearctic *Amaurobius* species have been considered in the revision (Leech 1972), the genus remains poorly studied. Thirteen species are known by a single taxonomic entry, 11 species are known by females and one by male. In addition, nine species are known from the same part of California in the counties around San Francisco Bay. *Amaurobius* is more diverse in the Palaearctic (40 species) and has in Eurasia disjunctive range (WSC 2019). Thirty-six species are known from the Western Palaearctic west of the Urals (WSC 2019) and three species in Far East Asia: two species in China and one undescribed species from Russia (Marusik & Kovblyuk 2011). The genus is most species rich in Balkans (over 20 species: 11 endemic for Greece and five species are endemics of the former Yugoslavia (see van Helsdingen 2018).

The taxonomy of Palaearctic *Amaurobius* is much better studied than in the Nearctic due to several identification books, internet resources (Nentwig et al. 2019) and recent revisions (Thaler & Knoflach 1991, 1993, 1995, 1998, 2002). Six species are known from females and two by males. Although the taxonomy of *Amaurobius* in the

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Balkan Peninsula has attracted much attention and was properly revised in a series of works by Thaler & Knoflach, other parts of the Southern Palaearctic are rather poorly studied. One of these regions is the Caucasus. So far, five species have been reported from the region (Mikhailov 2013; Otto 2018). Of these, only one species is endemic, *A. antipovae* Marusik et Kovblyuk, 2004, and only this species is properly documented. Four other species are either mentioned exclusively in faunistic papers and/or specimens are lacking in museum collections. Two species, *A. similis* and *A. pallidus* L. Koch, 1868, were illustrated in the monography of Georgian spiders (Mcheidze 1997, 2014), but only as females and in which the figures were reproduced from Tyschchenko (1971). Recent collecting efforts by the present authors in Georgia and Azerbaijan did not reveal any of the four species reported from Georgia. Among the material collected in the Lagodekhi Reserve we found two subadult females and 3 adult males. Detailed study of the males revealed that they do not belong to *A. pallidus* or *A. similis*, the two species reported previously from the reserve (Otto & Japoshvili 2018), but are more similar to *A. hercegovinensis* Kulczyński, 1915, a species known from the original description only. Comparison of specimens from Lagodekhi and the lectotype male of *A. hercegovinensis* reveals that they are not conspecific, and that the males from Lagodekhi belong to an undescribed species. The main goals of the present paper are: 1) description of the new species, 2) redescription of *A. hercegovinensis*, 3) demonstration of considerable size variation in *A. antipovae*, and 4) providing brief comments to *Amaurobius* species considered as *nomina dubia* or described outside the Holarctic.

Material and methods

Spiders were examined and photographed in the Zoological Museum, University of Turku, Finland using an Olympus SZX16 stereomicroscope with an Olympus E–520 camera. The images were stacked by using the Zerene Stacker software. Drawings were made using a ZEISS SV6 microscope and a Wacom IntuosPro in combination with Krita drawing software (version 3.1.3).

Abbreviations: *Bp*—baso-ventral process of tegulum, *Cf*—cymbium fold, *Co*—conductor, *d*—dorsal, *Da*—dorsal tibial apophysis, *Em*—embolus, *Ia*—intermediate tibial apophysis, *p*—prolateral, *Pa*—prolateral apophysis, *r*—retrolateral, *Ra*—retrolateral tibial apophysis, *Ta*—tegular apophysis, *To*—triangular outgrowth of dorsal tibial apophysis, *Tp*—tegular process, *v*—ventral, *Va*—ventral tibial apophysis.

All measurements are given in mm.

Taxonomic survey

Amaurobius C.L. Koch, 1837

***Amaurobius caucasicus* sp. n.**
Figs 3–4, 7–8, 15

Types: Holotype ♂, GEORGIA, ***Kakheti Region***, Lagodekhi Reserve, 41.87147°N, 46.31153°E, 1351 m, intermediate mixed montane forest with dominant beech, malaise trap, 12–23.IV.2014, leg. Japoshvili & Kirkitadze, deposited in the Museum für Naturkunde Berlin under the acronym ZMB/Arach 49131 (ex coll. Otto KVS 452/N37). Paratypes. 1 ♂, same location, 23.IV.–3.V.2014, ZMB/Arach 49132 (ex coll. Otto KBS 258/N38); 1 ♂, same location, 5–15.V.2014, Entomological Collection of the Manchester Museum, MMUE G7628.1 (ex coll. Otto KBS 259/N39).

Etymology: The name is derived from the Caucasus Major, where the specimens have been found. See also comments below.

Diagnosis. The new species differs from *A. antipovae* Marusik et Kovblyuk, 2004, the only other species described from the Caucasus, by having a gradually tapering dorsal tibial apophysis (*vs*. widened in the terminal 2/3), an intermediate apophysis shorter than the retrolateral one (*vs*. subequal), presence of a baso-ventral projection of the tegulum (*vs*. lacking) (Figs 8 & 13). *Amaurobius caucasicus* **sp. n.** clearly differs from *A. hercegovinensis* by having a thinner retrolateral apophysis, a triangle shaped tegulum in lateral view with a baso-ventral projection (*Bp*) (*vs*. rounded tegulum lacking projection), and a tegular apophysis longer than wide (*vs*. as wide as long).

Description. Male. Body length 6.00±0.65. Carapace 3.13±0.41 long, 2.20±0.16 wide. Abdomen 2.62±0.28 long. Carapace clay colored, cephalic region with hue of black (in one specimen very dark), especially on the sides

and black hue extending towards the fovea; thoracic region brighter, with 3 pairs of darker radial marks towards the bright fringe (Fig. 15); clypeus thin (approx. 1.1–1.3 of AME diameter); labium and gnathocoxae light brown to brown, darker than coxae and sternum, distal fringes white. Sternum yellow, towards the sides darker brownish. Chelicerae dark brown; anterior row with 4 teeth; second proximal tooth largest, posterior row with 3 teeth. Palp: femur yellow, patella, tibia and cymbium yellow with darkened bases of apophyses and cymbium, leg coxae yellow. Legs yellow to light brown, distal segments somewhat darker; femur, tibia and metatarsus of all legs with 3 more or less visible darker rings, variable leg spination and segment lengths given in Tabs 1–2. Leg I 3.7–3.9 times longer than carapace. Abdomen dark gray to black, heart region gray with 2 pairs of lateral black spots or broad black fringe and surrounded by a pale area, posterior half with rows of transversal and posteriorly smaller marks, venter pale, with three longitudinal dark bands, median band thinner than lateral bands, spinnerets pale to clay colored; cribellum reduced.

Palp as in Figs. 3–4, 7–8. Cymbium length 1.05±0.11; tibia with 5 apophyses: dorsal apophysis (*Da*) long (as long as tibia), tapering, with a sharp tip, directed antero-prolateraly (Fig. 4); retrolateral apophysis (*Ra*) straight, with rounded and somewhat widened tip, ca. 2/3 of tibia length (in lateral view) and about 3 times longer than stem width 2.9–3.3 times the width of the stem part (Fig. 8); intermediate apophysis (*Ia*) located between *Da* and *Ra*, digitiform and somewhat longer than half the length of *Ra* (Fig. 4); ventral apophysis (*Va*) short wider than long, with claw-like tip directed dorsally (lateral view), cymbium with a distinct fold (*Cf*) shaped like a three-sided pyramid (tetrahedron). Tegulum triangle-shaped in lateral view, with baso-ventral process (*Bp*); sperm duct straight in lateral view; tegular apophysis (*Ta*) longer than wide; tegulum with anterior process, and a spine is absent. Conductor bifurcate near the tip.

Female unknown.

TABLE 1. Leg spination (holotype), formula: proximal-median-distal, variation in brackets.

	Fe	Ti	Mt
palp	d3	--	--
I	d1 p1	p2 r2 v3-3	p2(3) r2(1) v3-3
II	d1 p1(2)	p2 r2 v1-2(1)-2	p2(3) r2(3) v2-2-2(3)
III	p1 r1	p2 r2 v1-2(1)-2	p3(2,4) r3 v2-2(1)-2(3)
IV	r1	r2 v1-1-2(0-1-2)	p3(4) r2 v2(1)-2(1)-2(1)

TABLE 2. Lengths of leg segments (holotype, extended version with paratypes in supplementary information).

	femur	patella	tibia	cymbium/ metatarsus	tarsus	palp/leg length
palp	1.27	0.51	0.42	--	1.03	3.23
leg I	3.03	1.10	3.25	3.11	1.44	11.93
leg II	2.39	0.93	2.02	1.93	0.95	8.22
leg III	2.15	0.76	1.62	1.72	0.88	7.13
leg IV	2.50	0.96	2.16	2.16	0.95	8.73

Distribution. The new species is known from the type locality only.

Comments: Among the spiders collected by D.E. Charitonov in the Lagodekhi Reserve, and stored in Janashia Museum (Tbilisi), there is a poorly preserved specimen labelled "*A. caucasicus*" and collection information: "25. VI.38, Lagodekhi, Giromsk", which is very probably conspecific with our specimens (S. Otto, personal observation). Unfortunately, we were not able to obtain these specimens for further study. The here described species was mentioned in Otto & Japoshvili (2018) as *Amaurobius sp*.

Amaurobius hercegovinensis Kulczyński, 1915

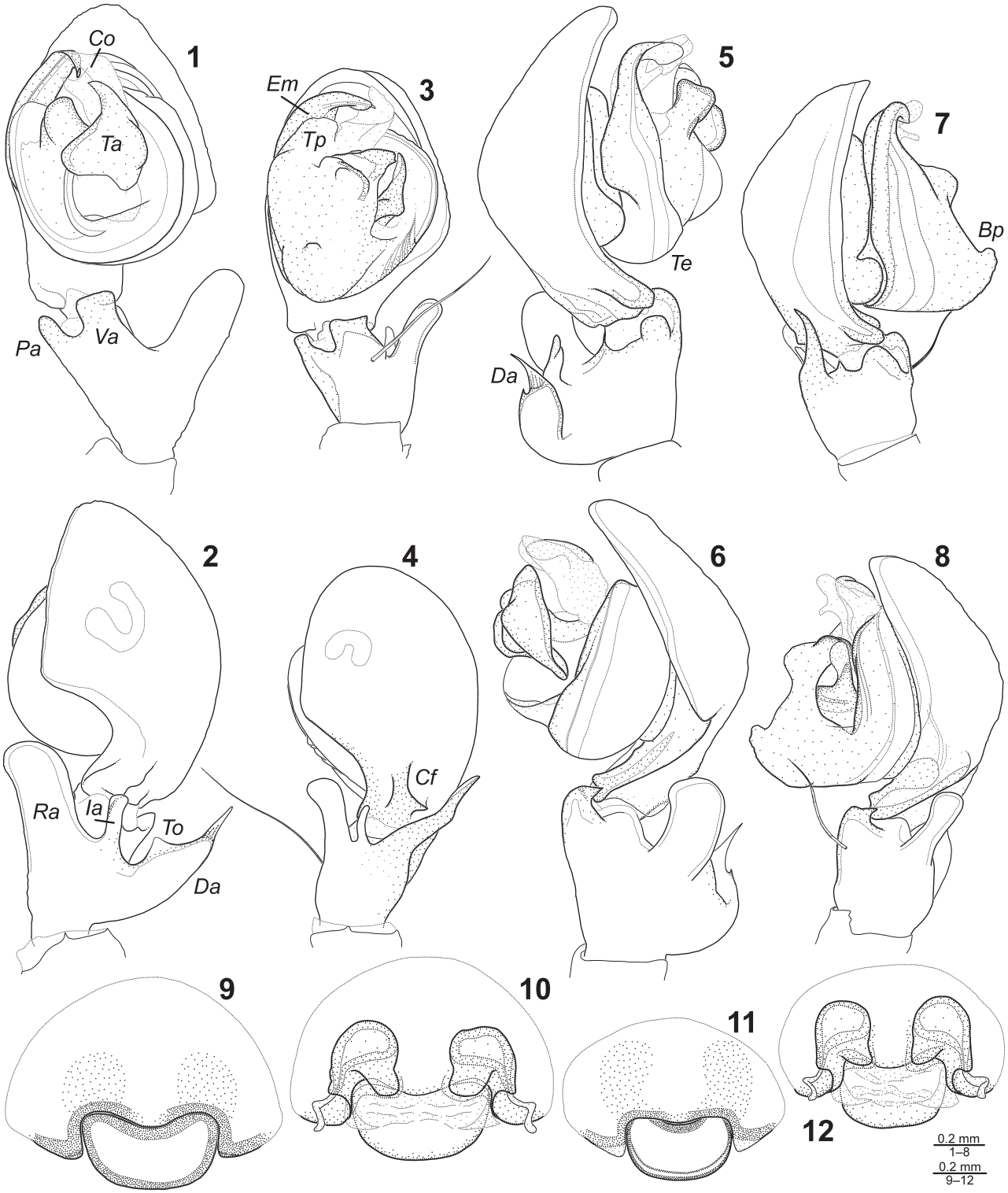
Figs 1–2, 5–6, 9–12

Amaurobius hercegovinensis Kulczyński, 1915: 901, pl. 66, f. 1–5 (♂♀).

Material: Lectotype 1♂ (designated here) and paralectotypes 4♀, with label: „Bilek [= Bileća] ad Trebinje, Jugosl.

Hercegovina", 42.876120° N, 18.414720° E, ca. 500 m, collection of the Zoological Institute of the Polish Academy of Sciences, MIZ 223524–223529.

Note. This species is known from the original description only, therefore we offer here a redescription.



FIGURES 1–12. Copulatory organs of *A. hercegovinensis* (1–2, 5–6, 9–12) and *A. caucasicus* **sp. n.** (3–4, 7–8). 1, 3—right male palp, ventral; 2, 4—ibid., dorsal; 5, 7—ibid., prolateral; 6, 8—ibid, retrolateral; 9, 11—epigyne, ventral; 10, 12—ibid., dorsal. Figs 9–10 and 11–12 belong to the same paralectotypes.

Diagnosis. Female of *A. hercegovinensis* is similar to that of *A. annulatus* Kulczyński, 1906, a species described from the female from the coastal part of Dalmatia (now belongs to Montenegro; distance between type localities is

less than 50 km). Females differ by the proportions of the median plate of the epigyne: width/length ratio ca 2.0 in *A. hercegovinensis* and 1.6 in the sibling species. *Amaurobius hercegovinensis* differs from *A. drenskii* Kratochvíl, 1934, a species known from a single female from Sarajevo (Bosnia) by an oval wide median plate *vs*. transverse thin (width/length ratio ca. 4.0) and lack of lateral teeth (Figs 9–12). *Amaurobius hercegovinensis* differs from *A. phaeacus* Thaler & Knoflach, 1998, a species known from Greece and Albania, by a longer median plate (width/length ratio ca 2.75 in *A. phaeacus*) and by a sharply pointed dorsal tibial apophysis (blunt in *A. phaeacus,* figs 1–3 in Thaler & Knoflach (1998)). The cymbial fold in *A. caucasicus* **sp. n.** is much less prominent in comparison to those in *A. hercegovinensis* and developed as a straight sclerotized ridge (cf. Figs 6 and 8).

Description. Male (lectotype). Body length ca. 6.75. Carapace 3.20 long, 2.41 wide. Abdomen 3.26 long. Carapace light brown, cephalic region brown, region in front of fovea pale, clypeus 1.8 times higher than AME diameter; labium and gnathocoxae pale. Sternum yellow with light brown fringe. Chelicerae brown, with 4 to 5 teeth in anterior row and 3 teeth in posterior row. Palpal femur, patella and cymbium pale, tibia brown, coxae pale, other leg segments light brown, metatarsus I brown, tibia I darker than femur and patella. Spination is given in Tab. 3, leg measurements in Tab 4. Abdomen pale with weakly developed darker lanceolate mark on anterior dorsum. Cribellum reduced.

Palp as in Figs. 1–2, 5–6. Femur almost as long as cymbium. Tibia with 5 apophyses, dorsal (*Da*), intermediate (*Ia*), retrolateral (*Ra*), ventral (*Va*) and prolateral (*Pa*). Dorsal apophysis claw like, sharply pointed with triangular outgrowth (*To*) near the base. Retrolateral apophysis the largest, as long as tibia. Intermediate apophysis digitiform. Ventral apophysis (*Va*) square shaped (abrupt on the tip). Prolateral apophysis (*Pa*) small semicircular. Cymbium with retrolateral angular projection (Cf), bulb globular, tegulum with distinct quadrangular anterior projection (*Tp*). Tegular apophysis sub-triangular, almost as wide as long.

TABLE 3. Leg spination in the male lectotype of *A. hercegovinensis*, formula: proximal-median-distal.

	Femur	Tibia	Metatarsus
I	d1 p1	p2 2 v3-3	p3 r3 v2-2-1
II	d3 p1	p2 r2 v3-3	p2 r2 v2-2-2
III	d2	p2 r2 v1-2-2	p2 r2 v2-1-2
IV	d2	p1 r1 v1-1-2	p2 r1 v1-1-2

TABLE 4. Lengths of leg segments of male lectotype of *A. hercegovinensis* (extended version in supplementary information).

	femur	patella	tibia	metatarsus	distal palp segment/ tarsus	total length
palp	1.23	0.53	0.63	--	1.26	3.65
leg I	3.02	1.10	3.02	2.68	1.37	11.19
leg II	2.55	1.08	2.23	2.10	1.05	9.01
leg III	2.24	1.01	1.65	1.75	--	--
leg IV	2.69	1.02	2.25	2.29	0.97	9.22

Female (n =4). Body length 6.90±0.76. Carapace 3.24±0.24 long, 2.22±0.17 wide, length/width ratio1.46. Abdomen 3.49±0.24 long. Clypeus 1.9 –2.0 times higher than AME diameter. Coloration like in male, gnathocoxae and labium pale or brown, palp pale, tarsus light brown or brown. Chelicera with 4 or 5 teeth in anterior row and 3 or 4 teeth in posterior row. Legs pale, metatarsus and tarsus I light brown or brown (also in leg II but less distinct), leg spination as shown in Tab. 5, lengths of leg segments in Tab. 6. Cribellum white or pale. Abdomen gray.

Epigyne: as in Figs 9–12. Median plate 1.8-2.25 times wider than high. Copulatory ducts indistinct, receptacles semiglobular, as long as median plate, spaced by more than one radius.

TABLE 5. Leg spination females: d—dorsal, pl—prolateral, rl—retrolateral, v—ventral, in brackets—variation.

	Femur	Tibia	Metatarsus
I	d1 p1(2)	p2 r1-1 v2-2-2(0)	p3(2) r3(1) v2-2-1(2)
II	d2 p2(1)	p2 r2 v2(1)-2(1)-2	p3 r3 v2-2-2(1)
III	d1(3)	p2 r2 v1-1-2	p3 r1-2 v2-1-1
IV	d1	r2 v1-1-2	p2(3) r1(0) v2-1-1

TABLE 6. lengths of leg segments of female no. 1 (extended version in supplementary information).

	femur	patella	tibia	metatarsus	distal palp segment/ tarsus	total length
palp	1.14	0.57	0.69	--	1.16	3.56
leg I	2.67	1.15	2.21	2.15	1.21	9.39
leg II	2.33	1.14	1.80	1.71	1.01	7.99
leg III	2.09	0.96	1.50	1.55	0.77	6.87
leg IV	2.44	1.06	2.06	1.95	0.91	8.42

Comments. It is possible that *A. hercegovinensis* could be a junior synonym of *A. annulatus*, a species described from the same region and having similar epigyne and size. The main difference between the two species is a lack of leg annulations in *A. hercegovinensis*. It is also possible that *A. annulatus* is a junior synonym of *A. fenestralis* (Ström, 1768), a species with similar epigyne and distinct leg annulations.

Distribution: *Amaurobius hercegovinensis* is so far known from the type locality only.

Amaurobius antipovae Marusik et Kovblyuk, 2004

Figs 13–14

Amaurobius antipovae Marusik & Kovblyuk, 2004: 56, f. 1–4, 7–11, 18–21 (♂♀).

Material examined: 5 ♂ 3 ♀ Russia, Krasnodar Province, Adler Town, city park, ca. 43.430°N 39.925°E, litter, 8.X.2004 , Y.M. Marusik leg.

Comment. While comparing *A. caucasicus* **sp. n.** with other species known in the region, we recognized significant differences in size of the males of *A. antipovae* collected in the same region (Figs 13–14). The large male is 1.5 times longer than small. Males differ not only in body size but also in the size of the palps.

FIGURES 13–15. Right male palp of *Amaurobius antipovae* (13) and male habitus of *A. antipovae* (14) and *A. caucasicus* **sp. n.** (15). 14—shows considerable variation of size in specimens collected on the same spot.

Comments on species known from outside the Holarctic and *nomina dubia*

It is not clear why some species are considered in the World Spider Catalog (2019) as *nomina dubia* while others, even species described from juveniles or lacking any illustration, are listed as valid species.

Nomina dubia

Amaurobius aculeatus Franganillo, 1926

Amaurobius aculeatus Franganillo, 1926: 78 (♀).

Comment. This species described from northeastern Spain. The brief species description lacks figures, indication of sexes and number of specimens. The type deposition remains unknown (Hubert 1965). Judging from the description, with a reddish carapace and uniformly coloured abdomen it could be *Titanoeca*.

***Amaurobius asuncionis* Mello-Leitão, 1946**
A. a. Mello-Leitão, 1946: 17, f. 1 (j).
Comment. The species was described and known from Paraguay. The two figures (habitus and epigyne) provided by Mello-Leitão do not allow allocation of this species to any genus of Amaurobiidae or Titanoecidae known from South America, but it is definitely not *Amaurobius*. Lehtinen (1967: 212) mentioned that type of this species is a juvenile, not a female as indicated in Mello-Leitão (1946) and the WSC (2019). It belongs to the Museo de La Plata and it was mentioned with reference to Schiapelli & Gerschman de Pikelin (in litt.) that it "is very poorly preserved and cannot be placed".

***Amaurobius flavovittatus* (Grube, 1861)**
Ciniflo falvovittatus Grube, 1861: 171 (j).
Amaurobius flavidus: Reimoser 1919: 189.
Comments. This species was described from Eastern Siberia based on a juvenile specimen. Judging from the name and brief description it may belong to *Nurscia albofasciata* (Strand, 1907), the only know large cribellate species with an abdominal pattern.

***Amaurobius franganilloi* Roewer, 1951**
Amaurobius inermis Franganillo, 1920: 139, f. 1 (♀, preoccupied name).
Amaurobius franganilloi Roewer, 1951: 455 (replacement name).
Comments. This species was described based on a female holotype from Portugal. The type specimen was not located (Hubert 1965). Judging from the brief description and indication of a uniformly coloured abdomen it is most likely belonging to *Titanoeca*.

Amaurobius luniger (Grube, 1861)
Ciniflo luniger Grube, 1861: 171 (j).
Amaurobius luniger: Reimoser 1919: 189; Wesołowska, 1988: 404; Mikhailov 1996: 113.
Comments. This species was described based on a juvenile specimen from the Amur River (Eastern Siberia). Judging from the brief description it may belong to *Titanoeca.*

***Amaurobius sinister* (Nicolet, 1849)**
Clubiona sinistra Nicolet, 1849: 439 (♀).
Amaurobius sinister: Simon 1892a: 237; Lehtinen 1967: 234.
Comments. The species was described from Chile and was originally placed in *Clubiona*. Simon (1887) transferred Nicolet's *Clubiona* without seeing the material into several genera belonging to different families (Anyphaenidae, Agelenidae, Cheiracanthiidae, Trachelidae and Amauribiidae). Lehtinen (1967) mentioned that it belongs to *Exlinea* Lehtinen, 1967 (a junior synonym of *Metaltella* Mello-Lietão, 1931), but had not transferred species due to lack of the types.

It could belong to one of seven amaurobiid or desid genera occurring in Chile: *Callevopsis* Tullgren, 1902, *Emmenomma* Simon, 1884, *Hicanodon* Tullgren, 1901, *Livius* Roth, 1967, *Macrobunus* Tullgren, 1901, *Metaltella* Mello-Lietão, 1931, *Neoporteria* Mello-Leitão, 1943 or *Rubrius* Simon, 1887.

***Amaurobius tristissimus* Holmberg, 1876**
Amaurobius tristissimus Holmberg, 1876: 11, f. 11 (♀).
Comments. This species was described from Argentina based on a female. The description is very brief and does not provide any essential details like the type of calamistrum, or the shape of the cribellum and epigyne. Types could not be located by Lehtinen (1967), who suggested it belonged either to *Metaltella* Mello-Leitão, 1931 (Desidae) or *Geoldia* Keyserling, 1891 (Titanoecidae). The latter genus and even family are unknown in Argentina so far (WSC 2019).

Amaurobius species described from outside the Holarctic and considered as valid species

***Amaurobius jugorum* L. Koch, 1868**
A. j.: Pesarini 1991a: 272, f. 11a–b, 15a–b, 16a–b (♂♀).
Amaurobius koponeni Marusik, Ballarin & Omelko, 2012: 58, f. 1–8 (♂). **Syn. n.**
Comments. *Amaurobius koponeni* was described based on the holotype male from Uttar Pradesh, India. It seems that specimen was either mislabeled or brought by chance from Italy to India. Judging from the shape of the male palp and size it is conspecific with *A. jugorum* and therefore the two names are synonymized here.

Amaurobius thoracicus Mello-Leitão, 1945
Amaurobius thoracicus Mello-Leitão, 1945: 232 (j).
Comments. This species was described based on a juvenile from Argentina and lacking any figures. Givven that there are no proven records of *Amaurobius* outside the Holarctic, this species is almost certainly misplaced in the genus and may belong to one of the few amaurobiid genera occurring in the Neotropical region. Lehtinen (1967: 212) supposed it belonged to Titanoecidae, a family represented by two species belonging to one genus, *Goeldia*, *G. luteipes* (Keyserling, 1891) and *G. patellaris* (Simon, 1892). Amaurobiidae are not reported so far from Argentina (WSC 2019). According to Lehtinen, the type is deposited in the Museo de La Plata.

***Amaurobius tristis* L. Koch, 1875**
Amaurobius tristis L. Koch, 1875b: 31, pl. 3, f. 3 (♀).
Comment. This species is known from Eritrea only. The type deposition is unknown. Lehtinen (1967) supposed that it is a member of the Titanoecidae. Judging from the schematic figure of the epigyne, an abdomen lacking a pattern and its size it could be *Pandava laminata* (Thorell, 1878) (Titanoecidae), a species known from this region. The epigyne illustrated by L. Koch is rather more similar to that in *Nurscia*, and particularly to *N. albosignata* Simon, 1874 and *N. albomaculata* (Lucas, 1846), but unlike in *A. tristis* all species of *Nurscia* have an abdominal pattern formed by a series of white paired spots. *Nurscia albomaculata* is known from Northern Africa (Bonnet 1959).

***Pandava laminata* (Thorell, 1878)**
Amaurobius laminatus Thorell, 1878: 168 (♂).
Amaurobius yanoianus Nakatsudi, 1943: 149, f. 2a–b (♀). **Syn. n.**
Pandava laminata:Almeida-Silva et al. 2010: 34, f. 1–37 (♂♀).
For complete list of references see WSC (2019).
Comments. *Amaurobius yanoianus* was described from Micronesia. Its type seems to have been lost during World War II (Tanikawa, pers. com.). Judging from the figures and verbal description provided by Nakatsudi (1943) *A. laminatus* is a junior synonym of the widespread titanoecid species *Pandava laminata*, described from Papua New Guinea and known from Eastern Africa to Polynesia (WSC 2019).

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