

Two new species belonging to *Coreodrassus* and *Poecilochroa* (Aranei: Gnaphosidae) from Anatolia with comments on taxonomy of both genera

Два новых вида пауков родов *Coreodrassus* и *Poecilochroa* (Aranei: Gnaphosidae) из Анатолии с комментариями по таксономическому составу обоих родов

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KEY WORDS: Araneae, Palaearctic, Turkey, species grouping, distribution limits, illustrated redescription, northernmost records, new synonym.

КЛЮЧЕВЫЕ СЛОВА: Araneae, Палеарктика, Турция, группы видов, границы распространения, иллюстрированное переописание, самая северная находка, новый синоним.

ABSTRACT. Two new species are described from Anatolia: *Coreodrassus recepsahini* sp.n. (♂♀) and *Poecilochroa ilkerakkusi* sp.n. (♂). *Coreodrassus recepsahini* sp.n. differs from the sibling *C. semidesertus* Ponomarev et Tsvetkov, 2006 (re-illustrated here) by the shape of copulatory organs. *Poecilochroa ilkerakkusi* sp.n. well differs from *P. hamipalpis* (Kroneberg, 1875) by contrast leg colouration. *Coreodrassus* Paik, 1892 is split in two species groups and diagnoses are provided. *Poecilochroa* Westring, 1874 species known from males are also split in two groups, of which the *senilis*-group may represent a separate genus. The type locality of the new species of *Coreodrassus* represents the westernmost record of the genus in the entire range. *Coreodrassus boldgivi* Jargalsaikhan, Fomichev et Nergui, 2023 syn.n. from Mongolia was found to be a junior synonym of *C. murphyi* Liu et Zhang, 2023. All distribution records of *Coreodrassus* species are mapped. The northernmost distribution limits of two genera are briefly discussed as well as Gnaphosidae species endemic and subendemic to Turkey.

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РЕЗЮМЕ. Описаны два новых вида из Анатолии: *Coreodrassus recepsahini* sp.n. (♂♀) и *Poecilochroa*

ilkerakkusi sp.n. (♂). *Coreodrassus recepsahini* sp.n. отличается от близкого *C. semidesertus* Ponomarev et Tsvetkov, 2006 деталями строения копулятивных органов. *Poecilochroa ilkerakkusi* sp.n. хорошо отличается от *P. hamipalpis* (Kroneberg, 1875) контрастной окраской. Род *Coreodrassus* Paik, 1892 разбит на две группы видов, приведён их состав и диагнозы. Виды рода *Poecilochroa* Westring, 1874 самцы которых известны разбиты на две группы видов. Виды группы *senilis* вероятно могут рассматриваться как отдельный род. Типовое местообитание нового вида *Coreodrassus* — самое западное во всём ареале рода. Установлено, что *Coreodrassus boldgivi* Jargalsaikhan, Fomichev et Nergui, 2023 syn. n. из Монголии является младшим синонимом *C. murphyi* Liu et Zhang, 2023. Все точки где были найдены представители рода *Coreodrassus* закартированы. В статье обсуждаются северные границы распространения двух родов равно как эндемичные и субэндемичные виды семейства Gnaphosidae на территории Турции.

Introduction

Spiders of Turkey are relatively well studied. Currently 1255 species belonging to 55 families are known from the country [Danişman *et al.*, 2024]. Gnaphosidae with 162 named species in 34 genera is most speciose family in Turkey [Danişman *et al.*, 2024]. Current studies

of gnaphosids reveal two species and one genus new to the country. At first look copulatory organs of these species look like in those of *Coreodrassus semidesertus* Ponomarev et Tsvetkov, 2006 and *Poecilochroa hamipalpis* (Kroneberg, 1875). Detail study of the male palp and epigyne of the former species and comparison with known congeners reveals that specimens from Anatolia belong to undescribed species. Although male of *Poecilochroa* has simple palp very similar to those in *P. hamipalpis* known from Central Asia, it has absolutely different pattern: black body and yellow tibia-tarsi vs. uniformly brown. Goals of this paper is to describe new species, comment two genera *Coreodrassus* Paik, 1984 and *Poecilochroa* Westring, 1874, synonymization of two names in *Coreodrassus* described in 2023, comment briefly species of Gnaphosidae endemic and subendemic to Turkey and also commenting northern distribution limits of two genera.

Material and methods

Spiders were hand-collected and preserved in 70% ethanol. Specimens were photographed using a Canon EOS 7D camera attached to an Olympus SZX16 stereomicroscope at the Zoological Museum, University of Turku (Finland) and a Canon EOS 250D camera attached to a Leica S8APO stereomicroscope at the Arachnological Museum, University of Kırıkkale (Turkey). Digital images were assembled using 'Zerene Stacker' and 'Helicon Focus' image stacking softwares. SEM micrographs were produced by SEM JEOL JSM-5200 scanning microscope at the Zoological Museum, University of Turku. The distribution map was produced using Microsoft Encarta (version 16.0.0.1117).

Additional material studied:

Poecilochroa variata (C.L. Koch, 1839), Fig. 9A–F: 1♂ (ZMUT), FINLAND, Korppoo, Björkö, 15.06.1968 (P.T. Lehtinen).

Poecilochroa hamipalpis (Kroneberg, 1875), Figs 7F, 8E–F: 1♂ (ZMMU), TAJIKISTAN, Khatlon Region, Dangara Distr, SW slope of Sanglokh (=Sanglok) Mt. Range, 38°13.091'N, 69°14.282'E, 1362 m, 30.04.2015 (Yu.M. Marusik).

The studied material has been shared between the following museums: KUAM — Arachnological Museum of Kırıkkale University, ZMMU — Zoological Museum of the Moscow State University and ZMUT — Zoological Museum, University of Turku.

Abbreviations used in the text and figures are as follows:

Parts of the copulatory organs: *Ag* — accessorial gland, *Ah* — anterior hood, *Cf* — cymbial fold, *Ch* — central hood, *Co* — conductor, *Da* — dorsal tibial apophysis, *Db* — dorsal branch of tibial apophysis, *Eb* — embolic base, *Ed* — dorsal arm of embolus, *Em* — embolus, *Ep* — embolus proper (shape of the embolic process), *Gr* — shallow groove, *Is* — intercalary sclerite, *Mh* — posterior hood, *Mp* — mesal pocket, *Pa* — patellar apophysis, *Re* — receptacle, *Sc* — scape, *Sd* — sperm duct, *St* — subtegulum, *Ta* — tegular (median) apophysis, *Td* — dorso-retrolateral tibial apophysis, *Tp* — proximal retrolateral tibial apophysis, *Vb* — ventral branch of tibial apophysis.

Somatic organs: *Ds* — dorsal abdominal scutum, *Gs* — epigastral scutum

Leg measurements are listed as: total length (femur, patella, tibia, metatarsus, tarsus).

Taxonomic survey

Coreodrassus Paik, 1984

Coreodrassus Paik, 1984: 49.

Coreodrassus: Song et al., 2004: 46.

Coreodrassus: Zhang, Zhu, 2008: 31.

Type species *Coreodrassus coreanus* Paik, 1984 (= *C. lancerinus* [Simon, 1893]) by monotypy.

DIAGNOSIS. *Coreodrassus* differs from other gnaphosid genera by having long (longer than patella) patellar apophysis with bent tip (bifurcate or digitiform) vs. if patellar apophysis present and long — not bent at the tip, having two tibial apophyses: retrolateral proximal one (*Tp*) and another dorso-retrolateral (*Td*), a character unknown in other Holarctic gnaphosid genera. Females of *Coreodrassus* can be distinguished from those belonging to other genera by having two pair of hoods and scape or septum vs. one hood and no scape/septum, or pair of anterior hoods but no scape.

DESCRIPTION. See Zhang & Zhu [2008].

DISTRIBUTION. The genus is distributed from Central Anatolia (35°E) to Hokkaido (ca. 153°E). The genus is restricted to thin span of longitudes and known from 32°N in China to 48°32'N is northern Ciscaspia (Fig. 10). We don't know other genera of spiders with so wide longitudinal range and so thin latitudinal one.

COMMENTS. Zhang & Zhu [2008] description of the genus was based on two species. Some peculiar characters were not mentioned, such as presence of dorsal abdominal scutum and distinct epigastral scutum in male (Fig. 1B). Cymbium has distinct retrolateral proximal fold (*Cf*, Figs 2A, 3A) not known in other gnaphosid genera. Subtegulum is very massive even as long as tegulum (Figs 2C, 5B). Embolus base has very proximal position and embolus itself almost transversal (Figs 4A, C, E, 5B). Although there is a kind of conductor (membranous lamella seen in Fig. 4D, but not seen in SEM figures) tip of embolus is resting on median (=tegular) apophysis, which has no claw like tip.

It is worth mentioning that all published figures of epigyne of *C. lancerinus* are looking very different in comparison to those illustrated for *C. interlisus* and for the new species described here. Epigyne has distinct scape, two pairs of hoods: anterior (*Ah*) and posterior (*Mh*).

SPECIES GROUPING. Based on the shape of copulatory organs genus can be split into two species groups: *interlisus* and *inflatus*. The *interlisus*-group includes: *C. forficatus* Zhang et Zhu, 2008, *C. interlisus* (O. Pickard-Cambridge, 1885), *C. lancerinus* (Simon, 1893) and *C. semidesertus* Ponomarev et Tsvetkov, 2006. The *inflatus*-group includes two remaining species: *C. inflatus* (O. Pickard-Cambridge, 1885) and *C. murphyi* Liu et Zhang, 2023.

Males of *interlisus*-group has patellar apophysis bifid at tip vs. digitiform, and females with pair of anterolateral hoods and pair of mesal (lateral) hoods with cavities directed mesally vs. anterolateral hoods large and mesal (lateral) hood with cavities directed laterally.

RELATIONSHIPS. Murphy [2007: 13] placed *Coreodrassus* into formal *Haplodrassus* group. This group unites "Genera of medium-sized to largish spiders (typical size range 4–14) with light brownish coloured abdomens, ...and which possessed smooth trochanters and whose males lack a dorsal scutum. This combination of characters not possessed by any other group." Five genera were placed into this group *Benoitodes* Platnick, 1993, *Coreodrassus* Paik, 1984, *Haplodrassus* Chamberlin, 1922, *Orodassus* Chamberlin, 1922 and *Parasyrisca* Schenkel, 1963.

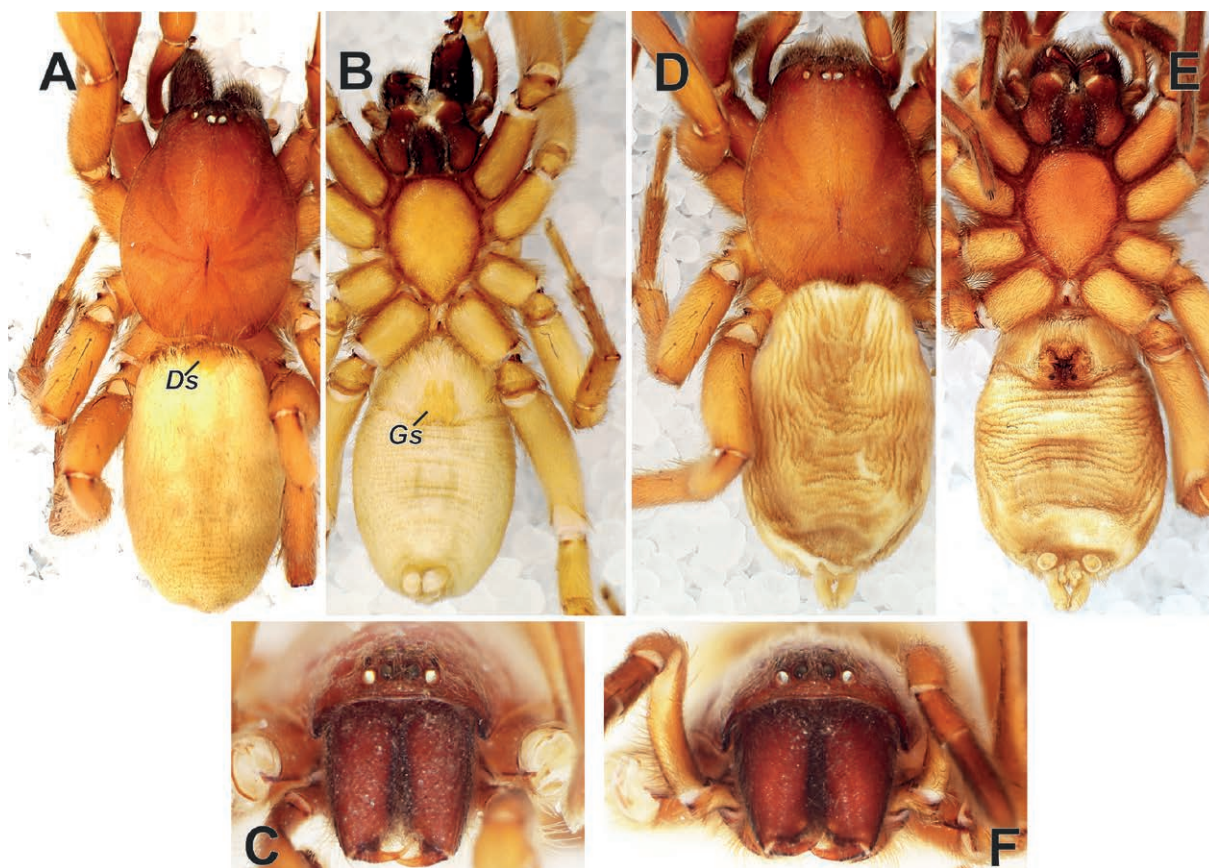


Fig. 1. General appearance of *Coreodrassus recepsahini* sp.n. male (A–C) and female (D–F). A, D — dorsal; B, E — ventral; C, F — frontal. Scale 1 mm. Abbreviations: *Ds* — dorsal abdominal scutum, *Gs* — epigastral scutum

Рис.1. Общий вид *Coreodrassus recepsahini* sp.n. самец (A–C) и самка (D–F). A, D — сверху; B, E — снизу; C, F — спереди. Масштаб 1 мм. Сокращения: *Ds* — дорзальный скutum брюшка; *Gs* — эпигастральный скutum.

Although a new species, described below has male palp very similar to the generotype and undoubtedly belongs to *Coreodrassus*, males of Turkish species, as well as those of *C. murphyi* have distinct dorsal scutum (Fig. 1A) and even ventral median epigastral one (Fig. 1B). Such scuta are not found in the generotype (see Murphy 2007) and in *C. semidesertus* (Ponomarev, pers. comm.). In addition, none of the members of *Haplodrassus* group have modified patella, tibia with two apophyses, as well as cymbial fold.

There are several genera of Gnaphosidae with modified in certain way male palpal femur e.g. *Echemella* Strand, 1906 (strong and short retrolateral spines), *Minosiella* Dalmás, 1921 (distal retrolateral lobe), *Zelotibia* Russell-Smith et Murphy, 2005 (roundly bent femur), *Cladothela* Kishida, 1928 (strong claw like retrolateral femoral spine), *Kishidaia* Yaginuma, 1960 (femoral ‘heel’), *Sillemia clavifemur* Reimoser, 1935 and *Siruasus crassipalpus* Roewer, 1961 (currently both in *Drassodes*, strongly swollen and enlarged femur). In contrast there are almost no gnaphosids with modified male palpal patella. As far as we know only *gracillimus* species group in *Synaphosus* Platnick et Shadab, 1980 (at least with five species), *Zelanda* Özdikmen, 2009 (exception one species) and *Avstroneulanda* Ovtsharenko et Zakharov, 2022 (some species without modification) have modified patella bearing apophysis. None of these genera have bulb similar to those in *Coreodrassus*.

Survey of species

Coreodrassus forficatus Zhang et Zhu, 2008

Fig. 10.

Coreodrassus forficatus Zhang et Zhu, 2008: 34, f. 7–13 (♂).

COMMENTS. The species is described based on the holotype male from Northern Xinjiang. It was treated in only one taxonomical publication. Record of *C. lancearius* (sub *Koreodrassus koreanus*) from southeastern Kazakhstan [Zyuzin, Tarabaev 1994] may refer to this species.

Coreodrassus infletus (O. Pickard-Cambridge, 1885)

Fig. 10.

Drassus infletus O. Pickard-Cambridge, 1885: 7, pl. 1, f. 4 (♀).

Drassodes infletus: Simon 1893: 361 (transfer from *Drassus*).

“*Drassodes*” *infletus*: Marusik, Omelko 2019: 285, f. 1B, 5C–D, 7C–L (♀).

Coreodrassus infletus: Liu, Zhang 2023: 295 (transfer from *Drassodes*).

COMMENTS. This species was recently redescribed based on the syntypes females from south-westernmost Xinjiang. Epigyne in this species differs from all congeners except for *C. murphyi*.

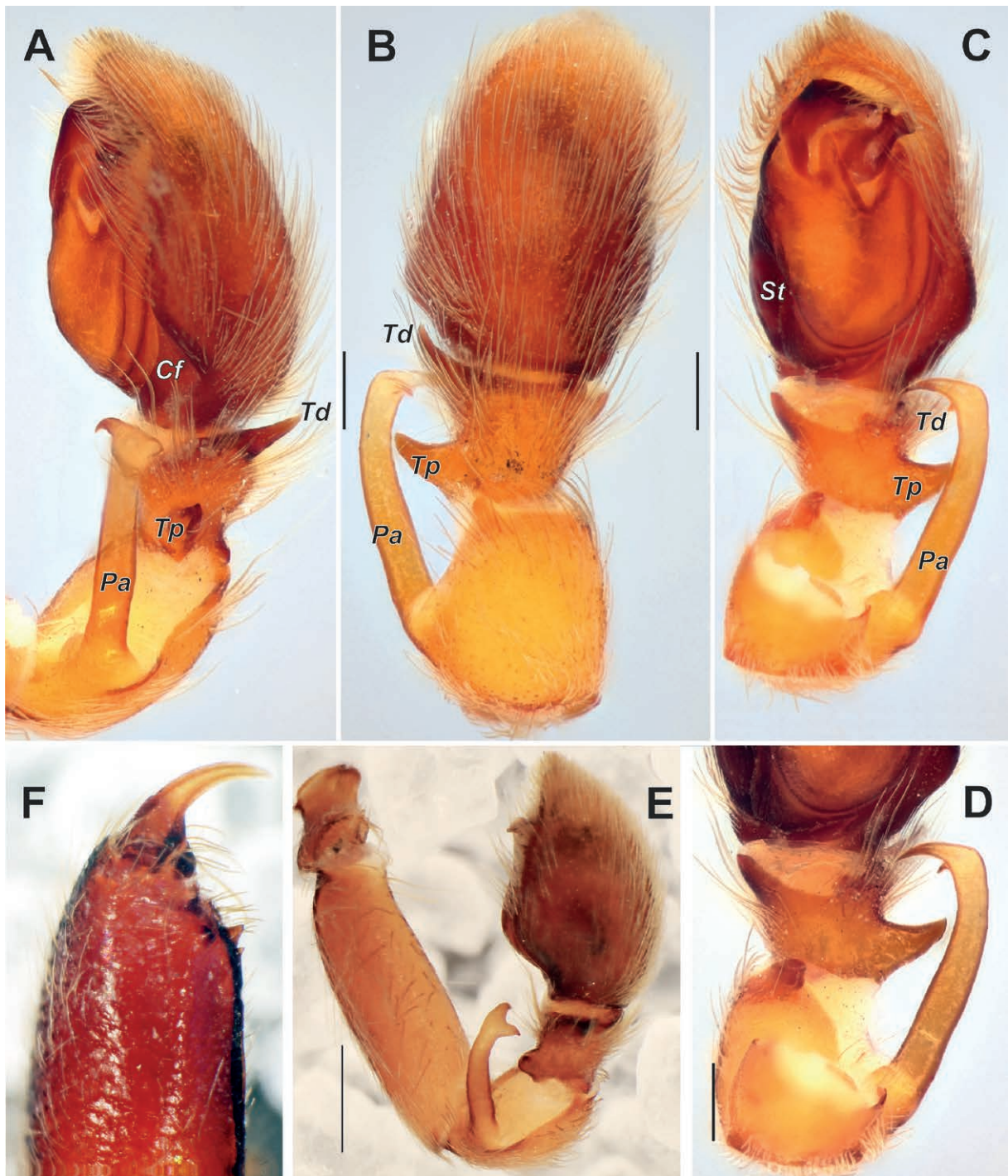


Fig. 2. Male palp (A–E) and chelicera of *Coreodrassus recepsahini* sp.n. A — retrolateral; B — dorsal; C — ventral; D — patella and tibia, ventral; E — whole palp; F — chelicera, posterior. Scale 0.2 mm, if not otherwise indicated. Abbreviations: Cf — cymbial fold; Pa — patellar apophysis; St — subtegulum; Td — dorso-retrolateral tibial apophysis; Tp — proximal retrolateral tibial apophysis.

Рис. 2. Пальпа самца (A–E) и хелицера *Coreodrassus recepsahini* sp.n. A — ретролатерально; B — сверху; C — снизу; D — колено и голень, снизу; E — вся пальпа; F — хелицера, сзади. Масштаб 0,2 мм, если не указано иначе. Сокращения: Cf — складка цимбиума; Pa — отросток колена; St — субтегулум; Td — дорзо-ретролатеральный отросток голени; Tp — проксимально-ретролатеральный отросток голени.

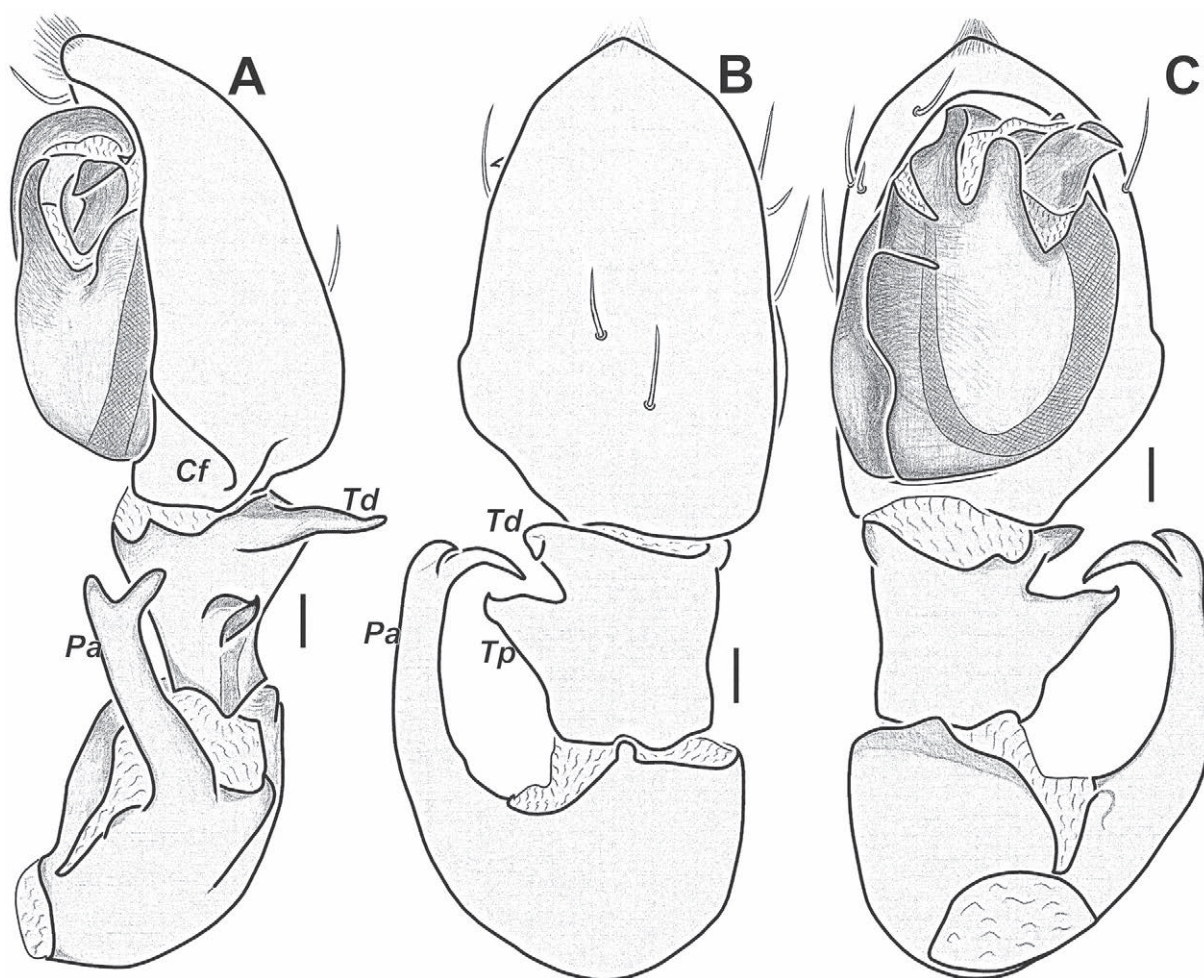


Fig. 3. Male palp of the paratype of *Coreodrassus semidesertus*. A — retrolateral; B — dorsal; C — ventral. Scale 0.1 mm. Abbreviations: Cf — cymbial fold; Pa — patellar apophysis; Td — dorso-retrolateral tibial apophysis; Tp — proximal retrolateral tibial apophysis. Courtesy of Zoya Kastrygina.

Рис. 3. Пальпа самца паратипа *Coreodrassus semidesertus*. А — ретролатерально; В — сверху; С — снизу. Масштаб 0,1 мм. Сокращения: Cf — складка цимбиума; Pa — отросток колена; St — субтегулум; Td — дорзо-ретролатеральный отросток голени; Tp — проксимально-ретролатеральный отросток голени. Рисунки Зои Кастрьгиной.

***Coreodrassus interlisus* (O. Pickard-Cambridge, 1885)**

Figs 6D–E, 10.

Drassus interlisus O. Pickard-Cambridge, 1885: 12, pl. 1, f. 9 (♂♀).

Coreodrassus interlisus: Marusik, Omelko, 2019: 278, f. 1A, 2E, 7A–B (♀, transfer from *Drassus*).

COMMENTS. For long time over a century the species was known only by original description and was redescribed very recently [Marusik, Omelko, 2019]. It was described based on syntypes of both sexes from localities lying in westernmost and southwesternmost Xinjiang and adjacent India. Male was not found among syntypes examined [Marusik, Omelko, 2019].

***Coreodrassus lancearius* (Simon, 1893)**

Fig. 10.

Drassodes lancearius Simon, 1893: 362, f. 324 (♂).

Drassodes potanini Schenkel, 1963: 41, f. 19 (♀).

Coreodrassus coreanus Paik, 1984: 50, f. 1–9 (♂).

Coreodrassus lancearius: Zhang, Zhu 2008: 32, f. 1–6 (♂♀).

For the complete list of references see WSC [2024].

COMMENTS. It is the type species of the genus. This species was considered in 24 taxonomic publications [WSC, 2024]. According to published records *C. lancearius* has widest range among congeners (Fig. 10) and occurs from Caspian Sea [Zyuzin, Tarabaev 1994] to Hokkaido [WSC, 2024]. However, it seems that some records refer to other species, the westernmost records from western Kazakhstan undoubtedly refer to *C. semidesertus*. Record from southeastern Kazakhstan [Zyuzin *et al.*, 1995] most likely to *C. forficatus*.

***Coreodrassus murphyi* Liu et Zhang, 2023**

Fig. 10.

Coreodrassus murphyi Liu, Zhang, 2023: 288, f. 1–6 (♂♀).

Coreodrassus boldgivi Jargalsaikhan, Fomichev et Nergui, 2023: 59, f. 1A–E, 2A–L (♂). **Syn.n.**

COMMENTS. This recently described species has unique for the genus undivided tip of the patellar apophysis of the male palp, although all other parts of the male palp are very similar to these in the generotype. Female of this species is also differs from another congeners except for *C. infletus* (O. Pickard-

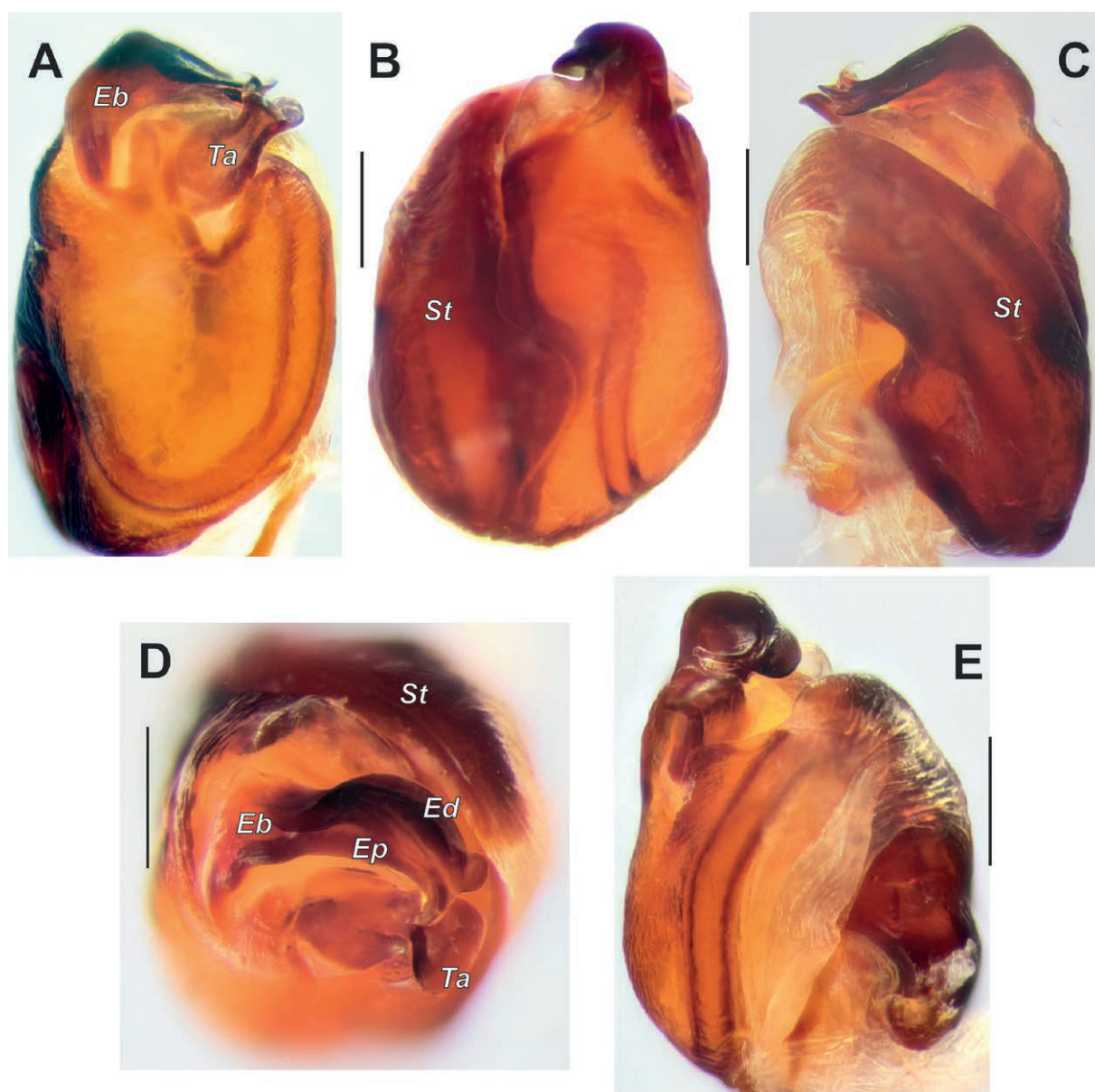


Fig. 4. Bulb of *Coreodrassus recepsahini* sp.n. A — ventral; B — prolateral; C — dorsal; D — anterior; E — prolateral. Scale 0.2 mm. Abbreviations: *Eb* — embolic base; *Ed* — dorsal arm of embolus; *Ep* — embolus proper (shape of the embolic process); *St* — subtegulum; *Ta* — tegular (median) apophysis.

Рис. 4. Бульбус *Coreodrassus recepsahini* sp.n. A — снизу; B — пролатерально; C — сверху; D — спереди; E — пролатерально. Масштаб 0,2 мм. Сокращения: *Eb* — основание эмболюса; *Ed* — ветвь эмболюса; *Ep* — эмболюс; *St* — субтегулум; *Ta* — тегулярный (=медиальный) отросток.

Cambridge, 1885). Currently it is known from two localities in north-central China and Dornogovi Aimag (Fig. 10). Records in adjacent territories may also belong to this species.

***Coreodrassus semidesertus* Ponomarev et Tsvetkov, 2006**

Fig. 3A–C, 10.

Coreodrassus semidesertus Ponomarev et Tsvetkov, 2006: 8, f. 6–8 (♂♀).

COMMENTS. The species is known from the original description only. The type series was collected from several localities in the lower reaches of Ural River on both left (Asian) and right (European) banks. The figures are very sketchy. Here

we are providing figures made by Zoya Kastygina from the paratype male to show differences with new species.

***Coreodrassus recepsahini* sp.n.**

Figs 1, 2, 4, 5A–B, 6A–C, 10.

TYPES. Holotype ♂ and paratypes 2♂ 1♀ (KUAM), TURKEY, Van Prov., Saray Dist., Kepir Vill., 38°23'58.2"N 44°04'40.6"E, 2550 m, meadow, 12.X.2015, T. Danişman leg.

ETYMOLOGY. The species is named in honor of the late Recep Şahin (Kırıkkale, Turkey), professor of mathematics, friend of Turkish authors.

DIAGNOSIS. Male of the new species is similar to those of *C. semidesertus* from which it can be distinguished by having

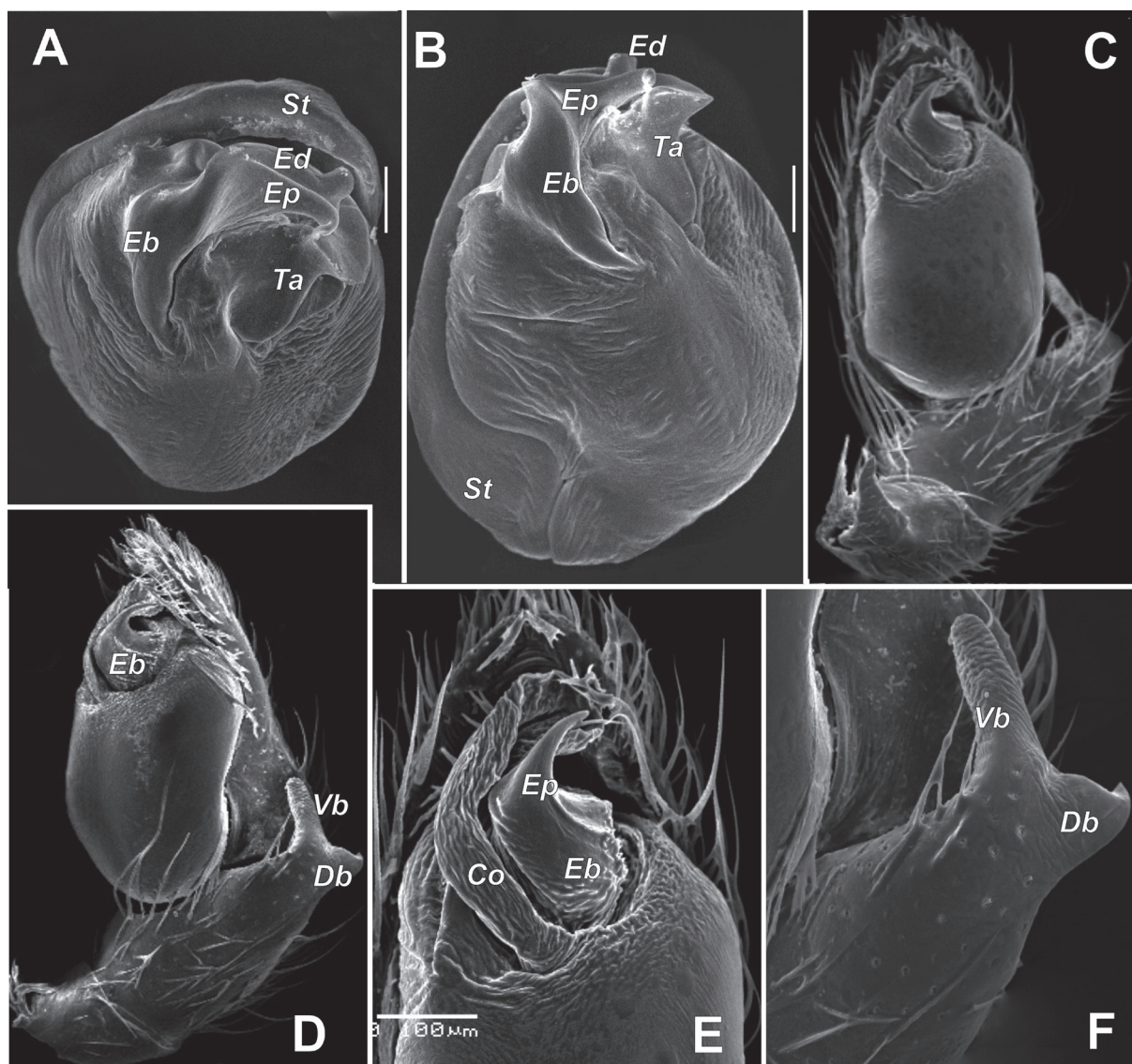


Fig. 5. SEM microphotographs of the male palps of *Coreodrassus receptahini* sp.n. (A–B) and *Poecilochroa ilkerakkusi* sp.n. (C–F). A–B — bulb, anterior and ventro-prolateral; C–D — palp, ventral and retrolateral; E — distal part of palp, ventral; F — retrolateral tibial apophysis, retrolateral. Scale 0.1 mm. Abbreviations: Co — conductor; Db — dorsal branch of tibial apophysis; Eb — embolic base; Ed — dorsal arm of embolus; Ep — embolus proper (shape of the embolic process); St — subtegulum; Ta — tegular (median) apophysis; Vb — ventral branch of tibial apophysis.

Рис. 5. Сканирующие фотографии палпы самцов *Coreodrassus receptahini* sp.n. (A–B) и *Poecilochroa ilkerakkusi* sp.n. (C–F). A–B — бульбус, спереди и вентро-пролатерально; C–D — палпы, снизу и ретролатерально; E — дистальная часть палпы, снизу; F — ретролатеральный отросток голени, ретролатерально. Масштаб 0,1 мм. Сокращения: Co — кондуктор; Db — дорзальная ветвь отростка голени; Eb — embolic base; Ed — dorsal arm of embolus; Ep — собственно эмболиус (показана форма выроста эмболиуса); St — субтегулум; Ta — тегулярный (=медиальный) отросток; Vb — нижняя ветвь отростка голени.

relatively shorter palpal tibia (cf. Figs 2A–E and Fig. 3), basal position of RTA vs. mesal, straight dorsal tibial apophysis (*Da*) vs. bent, by lacking cymbial spines vs. present. Female of new species is most similar to those of *C. interlisus* and differ by longer septum (*Sc*) (posterior width/length 1.7 vs. 3), larger mesal pockets (*Mp*) spaced by ca. 2 lengths vs. 5.

DESCRIPTION. Male (holotype). Total length 8.0. Carapace 3.7 long, 2.8 wide. Abdomen 4.3 long, 2.5 wide. Ocular area 0.70 long. Chelicerae 1.4 long, 0.6 wide. Sternum 2.0 long, 1.50 wide. Leg lengths: I 9.5 (2.7, 1.3, 2.4, 1.8, 1.3), II 8.0 (2.3, 1.1, 1.9, 1.6, 1.1), III 6.9 (1.9, 1.0, 1.4, 1.6, 1.0), IV 7.9 (2.8, 1.2, 2.2, 2.5, 1.2). Carapace light brown (Fig. 1A). Clypeus dark brown, about of diameter of anterior lateral eye (Fig. 1C). Chelicerae dark brown,

with 2 promarginal, 1 retromarginal teeth (Fig. 2F). Sternum light yellowish brown, margins dark (Fig. 1B). Abdomen dark yellow with small anterior scutum (*Ds*); venter whitish yellow, gonopore area with small scutum (*Gs*). Spinnerets yellow (Fig. 1B). Coxae, femora, patellae yellowish brown, other segments brown and all segments covered with dark setae (Fig. 1A–B).

Palp as in Figs 2A–E, 4, 5A–B; femur unmodified, slightly swollen in mid part, about 3 times longer than wide, as long as tibia+cymbium; patella swollen, wider and 2 times longer than tibia, patellar apophysis (*Pa*) as long as patella, 8 times longer than wide, tip bent at right angle toward axis of palp and bifurcate, with claw like short sharply pointer arms; tibia as wide as long, proximal part 2 times thinner than distal in dorsal view,

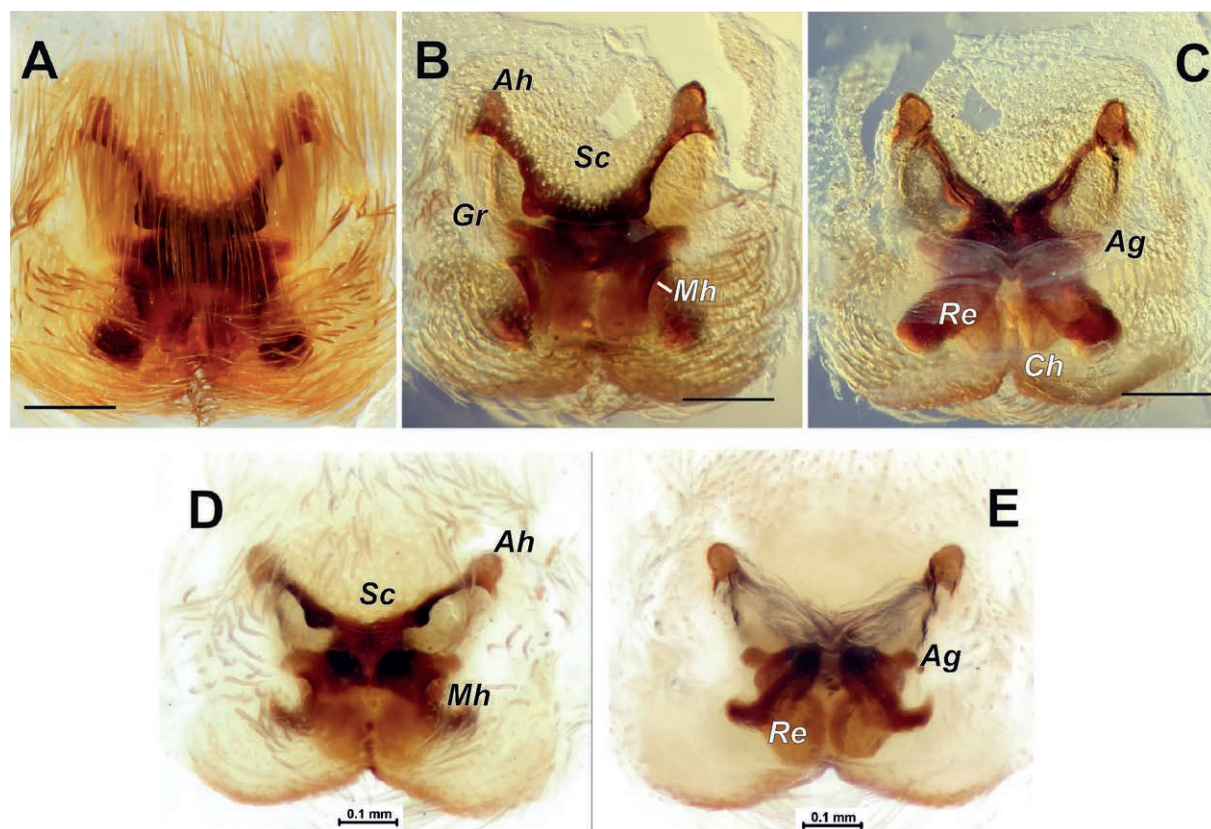


Fig. 6. Epigynes of *Coreodrassus reapsahini* sp.n. (A–C) and *C. interlisus* (D–E). A — intact, ventral; B, D — dissected, ventral; C, E — macerated, dorsal. Scale 0.2 mm if not otherwise indicated. D–E — after Marusik & Omelko [2019]. Abbreviations: Ag — accessorial gland; Ah — anterior hood; Ch — central hood; Gr — shallow groove; Mh — posterior hood; Re — receptacle; Sc — scape.

Рис. 6. Эпигины *Coreodrassus reapsahini* sp.n. (A–C) и *C. interlisus* (D–E). A — интактная, снизу; B, D — отпрепарированная, снизу; C, E — мацерированная, сверху. Масштаб 0,2 мм если не указано иначе. D–E — по Marusik & Omelko [2019]. Сокращения: Ag — железа; Ah — передний карман; Ch — центральный карман; Gr — неглубокий канал; Mh — задний карман; Re — рецептакула; Sc — скапус.

with proximal retrolateral (*Tp*) and dorsal (*Td*) apophyses, both conical in shape and straight, retrolateral originates at base of tibia; cymbium ca. 1.6 times longer than wide, with 2 prolateral spines, with short roundly bent tip, retrobasally with small fold (*Cf*); bulb oval 1.5 time longer than wide; subtegulum (*St*) large, longer than tegulum itself; sperm duct U shaped, not meandering; tegular (=median) apophysis (*Ta*) bent retrolaterally, not claw like, with anterior groove serving as resting place for tip of embolus; conductor indistinct; embolus originates at ca 10:30 o'clock position, at 12 o'clock position embolus bifurcate, and embolus proper (*Ep*) directed posterior-laterally, tip prolaterally; dorsal arm of embolus (*Ed*) with lobe on tip.

Female. Total length 9.30. Carapace 4.2 long, 3.2 wide. Abdomen 5.1 long, 3.4 wide. Ocular area 0.90 long. Chelicerae 1.60 long, 1.0 wide. Sternum 2.1 long, 1.6 wide. Leg lengths: I 10.1 (3.0, 1.3, 2.5, 2.0, 1.3), II 8.5 (2.5, 1.2, 2.0, 1.6, 1.2), III 7.6 (2.1, 1.1, 1.5, 1.7, 1.2), IV 10.9 (3.0, 1.5, 2.5, 2.6, 1.3). Carapace light brown (Fig. 1D). Clypeus dark brown ca. diameter of anterior lateral eye (Fig. 1F). Chelicerae dark brown (Fig. 1F). Sternum like in male (Fig. 1E). Abdomen whitish yellow and densely covered with dark setae (Fig. 1D). Venter whitish yellow and covered with dark setae (Fig. 1E). Spinnerets yellow (Fig. 1E). Legs coxae, femora, patellae yellowish brown, other segments brown and all segments covered with black setae (Fig. 1D–E).

Epigyne as in Fig. 6A–C; epigynal plate almost as long as wide; fovea indistinct; with large inflexible scape (*Sc*) lacking

pit, anterior part ca. 0.6 of plate width, posterior margin straight, half thinner than anterior width; latero-anterior margins of septum with deep hoods (*Ah*) longer than wide; shallow grooves (*Gr*) originates near postero-lateral margins of septum and running to anterior hoods; posterior half of plate with pair of hoods (*Mh*) directed mesally and ventrally; copulatory openings indistinct. Receptacles (*Re*) oval, more than 3 times longer than wide, converging anteriorly and fused; copulatory ducts indistinct; anteriorly receptacles with globular accessorial gland (*Ag*).

DISTRIBUTION. Known only from the type locality.

Poecilochroa Westring, 1874

Poecilochroa Westring, 1874: 45.

Poecilochroa: Simon, 1893: 371.

Poecilochroa: Levy, 1999: 429.

Type species *Pythonissa variana* C.L. Koch, 1839, from Germany, by monotypy.

COMMENTS. The genus was never revised in wide scale and for long time it includes species currently belonging to *Kishidaia* Yaginuma, 1960 (4 species). Up to date 42 species distributed in all realms except Australasia and the Nearctic are considered in this genus. Most of species are known from a single sex (24 from females and 7 from males) or by juveniles (2) and even of unknown sex (1). It is very likely that most of species are misplaced in the genus.

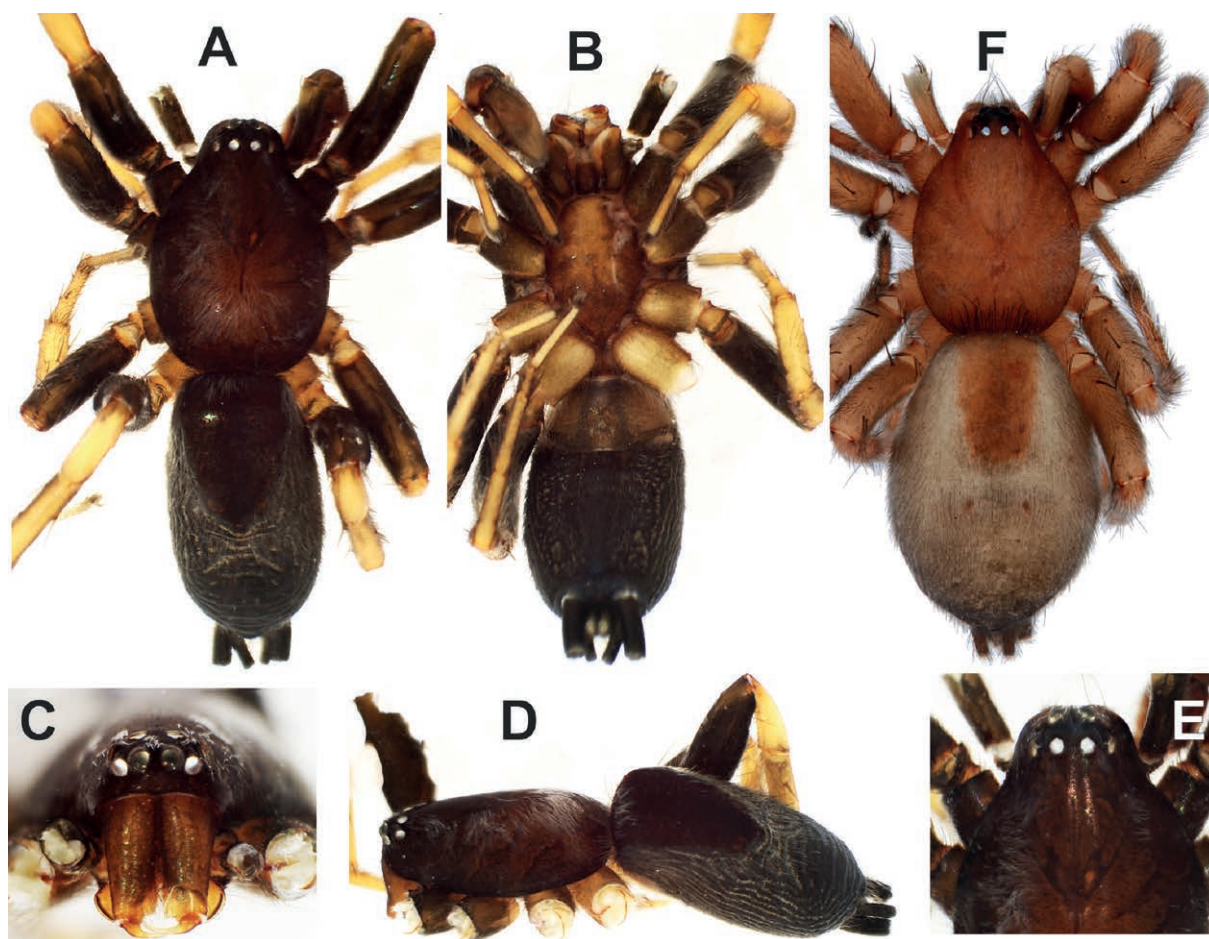


Fig. 7. General appearance of the holotype male of *Poecilochroa ilkerakkusi* sp.n. (A–E) and *P. hamipalpis* (F). A, F — habitus, dorsal; B, D — habitus, ventral and lateral; C, E — prosoma, anterior and dorsal. Scale 1 mm. F — after Fomichev & Marusik [2021].

Рис. 7. Общий вид самцов *Poecilochroa ilkerakkusi* sp.n. (голотип, А–Е) и *P. hamipalpis* (F). А, F — общий вид, сверху; В, D — общий вид, снизу и сбоку; С, Е — просома, спереди и сверху. Масштаб 1 мм. F — по Fomichev & Marusik [2021].

Based on the shape of the palp it is possible to subdivide genus (Palearctic and Asian species known from males) in two groups: *variana* and *senilis*.

The *variana*-group

Differ from *senilis*-group by having long gradually tapering tibial apophysis (Fig. 9C) (vs. bifurcate), having intercalary sclerite (*Is*: Fig. 9D–F) and lacking conductor (vs. intercalary sclerite absent and conductor present).

COMPOSITION: *P. albomaculata* (Lucas, 1846) West Mediterranean; *P. variana* West Palearctic and *P. dayamibrookiana* Barrion et Litsinger, 1995 from Philippines. The later species is tentatively placed in the group due to long tibial apophysis, but structure of the bulb remains unclear.

Poecilochroa variana, the generotype, has the widest range and a single species of the whole genus that penetrates to the boreal zone. The northernmost locality lies in Holmön Island, Bothnia Bay (ca 63°46'N, 20°52'E, <https://laji.fi/en/taxon/MX.203122/occurrence>).

The *senilis*-group

COMPOSITION: *P. fuscata* Simon, 1914, Mediterranean; *P. hamipalpis* (Kroneberg, 1875), Central Asia; *P. loricata* Kritscher, 1996, Malta; *P. perversa* Simon, 1914, France; *P. poonaensis* (Tikader, 1982), West Palearctic and India; *P. pug-*

nax (O. Pickard-Cambridge, 1874) and *P. senilis* (O. Pickard-Cambridge, 1872), Mediterranean, and *P. senilis auspex* (Simon, 1878), West Mediterranean.

REMARK. Some species have contrast black and white coloration, while another are uniformly light brown, even species having similar copulatory organs. Most likely this group will be considered in a separate genus.

Poecilochroa ilkerakkusi sp.n.

Figs 5C–F, 7A–E, 8A–D, 10.

TYPE. Holotype ♂ (KUAM), TURKEY, Kahramanmaraş Prov., Andırın Dist., Emirler Vill., Kanlıböğüt promenade, 37°37'03.3"N 36°26'46.5"E, 951 m, leaf litter in oak forest, 29.VI.2020, T. Danişman & İ. Coşar leg.

ETYMOLOGY. The species is named in honor of late İlker Akkuş (Kırıkkale, Turkey), a deceased professor of mathematics, friend of Turkish authors.

COMMENT. There is one species in the Middle East known only from female, *P. golan* Levy, 1999 and accounting similarities between faunas of Turkey and Israel, from where *P. golan* is known our new species can be potentially conspecific.

DIAGNOSIS. The new species have male palp very similar to those in *P. hamipalpis* however can be easily distinguished by having contrast colouration (Fig. 7A–B) vs. uniformly coloured

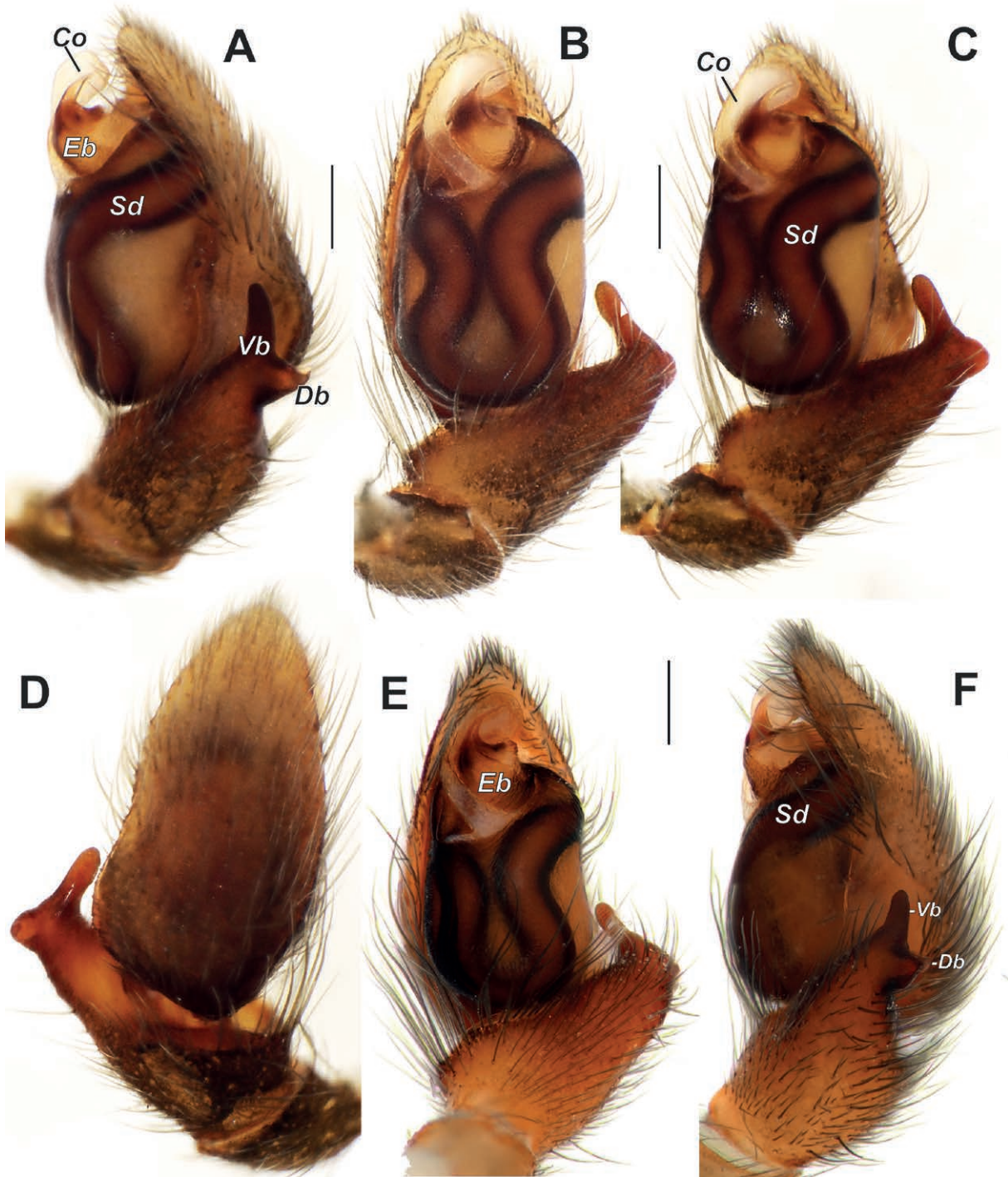


Fig. 8. Male palp of the holotype of *Poecilochroa ilkerakkusi* sp.n. (A–D) and *P. hamipalpis* (E–F). A, F — retrolateral; B, E — ventral; C — ventro-retrolateral; D — dorsal. E–F after Fomichev & Marusik [2021]. Scale 0.2 mm. Abbreviations: Co — conductor; Db — dorsal branch of tibial apophysis; Eb — embolic base; Sd — sperm duct; Vb — ventral branch of tibial apophysis.

Рис. 8. Пальпы самцов *Poecilochroa ilkerakkusi* sp.n. (голотип, A–D) и *P. hamipalpis* (E–F). A, F — ретролатерально; B, E — снизу; C — вентро-ретролатерально; D — сверху. E–F по Fomichev & Marusik [2021]. Масштаб 0,2 мм. Сокращения: Co — кондуктор; Db — дорзальная ветвь тибияльного отростка; Eb — основание эмболюса; Sd — сперматическая трубка; Vb — вентральная ветвь отростка голени.

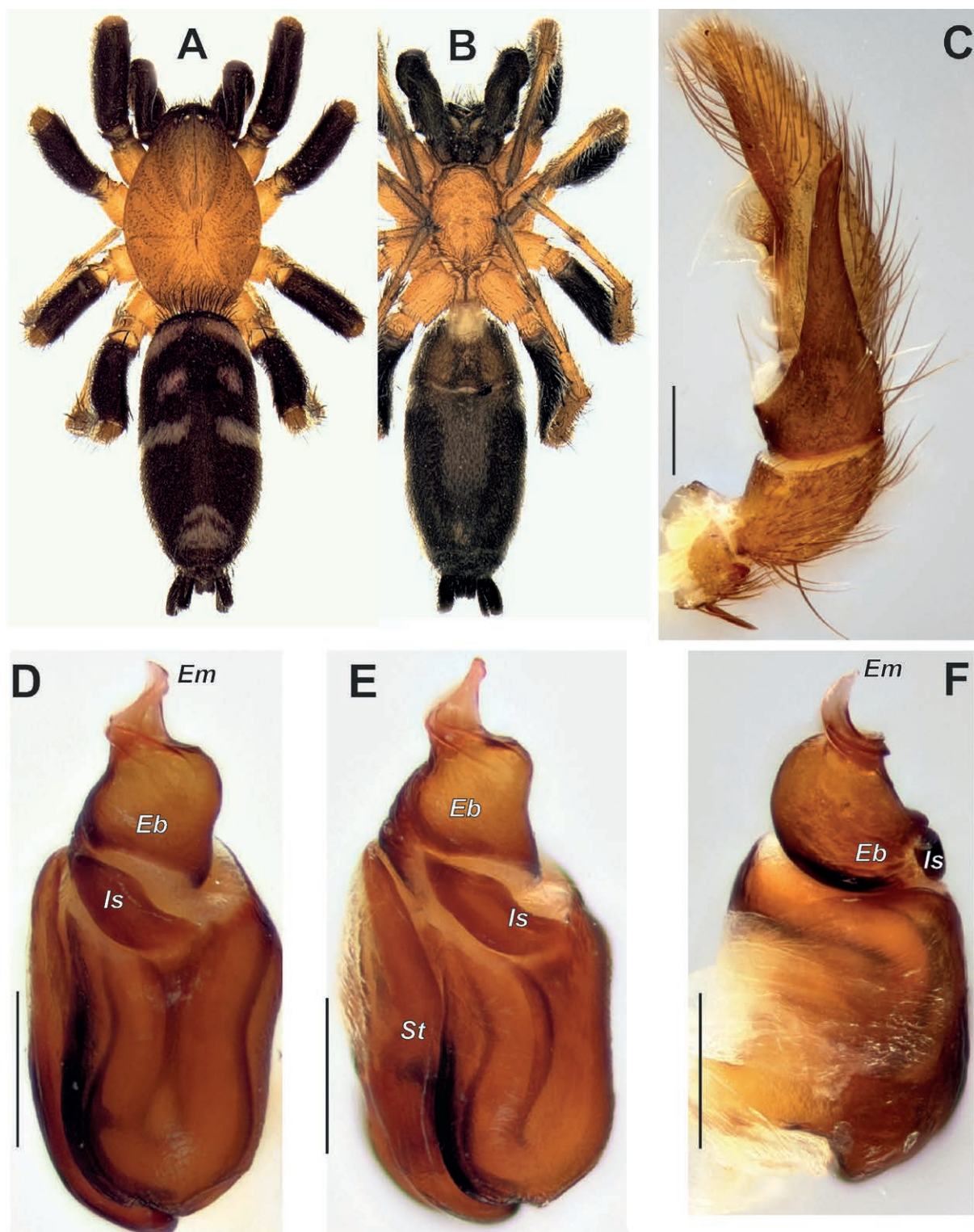


Fig. 9. Habitus and male palp of *Poecilochroa variana*. A–B — male, dorsal and ventral; C — patella, tibia and cymbium, retrolateral; D–F — bulb ventral, ventro-prolateral and dorsal. Scale 0.2 mm if not otherwise indicated. A–B from France, courtesy of Pierre Oger; D–F — from Finland. Abbreviations: *Eb* — embolic base; *Em* — embolus; *Is* — intercalary sclerite; *St* — subtegulum.

Рис. 9. Внешний вид и папы самца *Poecilochroa variana*. А–В — самец, сверху и снизу; С — колено, голень и цимбиум, ретролатерально; D–F — бульбус, снизу, вентро-пролатерально и сверху. Масштаб 0,2 мм, если не указано иначе. А–В из Франции, предоставлено Pierre Oger; D–F — из Финляндии. Сокращения: *Eb* — основание эмболюса; *Em* — эмболюс; *Is* — промежуточный склерит; *St* — субтегулум.



Fig. 10. Distribution records of *Coreodrassus* species: *C. forficatus* ✦ four pointed star; *C. interlisus* ◆ diamond; *C. infletus* ✕ cross mark; *C. murphyi* ▼ inverted triangle; *C. lancearius* ● circle; *C. reapsahini* sp.n. ▲ triangle; *C. semidesertus* ■ square.

Рис. 10. Точки находок видов рода *Coreodrassus*: *C. forficatus* ✦ четырёхлучевая звезда; *C. interlisus* ◆ ромб; *C. infletus* ✕ буква “X”; *C. murphyi* ▼ перевернутый треугольник; *C. lancearius* ● круг; *C. reapsahini* sp.n. ▲ треугольник; *C. semidesertus* ■ квадрат

(Fig. 7F). Two sibling species have different proportions of carapace and abdomen carapace relatively longer in the new species: length/width ratio 1.43 vs. 1.3, abdomen length/width ratio 1.7 vs. 1.36. *Poecilochroa ilkerakkusi* sp.n. have relatively longer cymbium length/width ratio ca 2.0 vs. 1.8, different shape of sperm duct bent at right angle (retrolateral view) vs. forming obtuse angle. There are certain differences in the shape of tibial apophysis: dorsal arm is relatively longer (cf. Figs 8A–D and 8E–F). Male palp is also similar to *P. furcata* Simon, 1914 but well differs by right angle turn of the sperm ducts vs. roundly bent, by triangle dorsal branch of tibial apophysis vs. digitiform and also by having no abdominal pattern vs. white transversal band.

DESCRIPTION. Male (holotype). Measurements. Total length 4.7. Carapace 2.5 long, 1.9 wide, 1.1 high. Abdomen 3.4 long, 1.6 wide, 1.0 high. Ocular area 0.7 long. Palp 1.3 long. Chelicerae 0.8 long, 0.45 wide. Sternum 1.6 long, 1.0 wide. Leg lengths: I 5.95 (1.85, 0.85, 1.4, 1.1, 0.75), II 5.75 (1.8, 0.8, 1.3, 1.15, 0.7), III 5.6 (1.7, 0.7, 1.2, 1.2, 0.8), IV 7 (2.0, 1.0, 1.6, 1.9, 0.5). Carapace dark brown (Fig. 7A). Clypeus dark brown, about of diameter of anterior lateral eye (Fig. 7C). Chelicerae light brown (Fig. 7C). Sternum light brown, margins dark (Fig. 7B). Abdomen pale sepia, dark brown dorsal abdominal scutum (*Ds*) ca 0.5 of abdomen length. Venter pale sepia. Spinnerets blackish brown (Fig. 7A, B, D). Femora brown, other segments yellowish brown, femora IV ventrally yellow, femora III lighter than I–II. All leg segments covered with dark setae (Fig. 7A–B).

Palp as in Fig. 8A–D; femur dark brown, about 3 times longer than wide, as long as cymbium, patella brown, tibia about as long as wide with massive bifurcated retrolateral apophysis, ventral branch (*Vb*) digitiform, longer than width of apophysis, dorsal branch (*Db*) triangular; cymbium 2 times longer than wide; subtegulum hidden by tegulum; tegulum oval 1.5 times longer than wide; sperm duct very wide, about 1/3 of tegulum width, forming 8-shaped figure (ventral view), in retrolateral view bent on right angle; conductor (*Co*) membranous, originates from midline of tegulum just from posterior edge of embolic base (*Eb*); embolus base as wide as sperm duct, located at 12 o'clock position, embolus proper (*Ep*) claw like, roundly bent.

Female unknown.

DISTRIBUTION. Known from the type locality only.

Discussion

With the current study, the number of endemic Gnaphosidae species in Turkey reached 12 species (ca. 7%) [Seyyar *et al.*, 2017; Danişman *et al.*, 2023]. These are

Berinda cooki Logunov, 2012, *B. hakani* Chatzaki et Seyyar, 2010, *Berlandina pulchra* (Nosek, 1905), *Coreodrassus reapsahini* sp.n., *Drassodes bifidus* Kovblyuk et Seyyar, 2009, *D. similis* Nosek, 1905, *Gnaphosa lucifuga minor* Nosek, 1905, *Nomisio orientalis* Dalmás, 1921, *Poecilochroa ilkerakkusi* sp.n., *Pseudodrassus ricasolii* Caporiacco, 1935, *Zelotes turcicus* Seyyar, Demir et Aktaş, 2010 and *Z. wunderlichi* Blick, 2017. Of these, *Berlandina pulchra* (♀), *Drassodes similis* (♀), *Gnaphosa lucifuga minor* (♂) and *Pseudodrassus ricasolii* (juv.) are poorly known by original description. One species, *Parasyrisca turkenica* Ovtsharenko, Platnick et Marusik, 1995 is subendemic to Turkey (known also from Iran) [Zamani *et al.*, 2022]. It is thought that the rate of endemism will be much higher with more detailed taxonomic studies on the Gnaphosidae in Turkey.

Conflict of interests

The authors declare no potential conflict of interest.

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