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On several new or poorly-known Oriental Paradoxosomatidae (Diplopoda: Polydesmida), XXII

О нескольких новых или плохоизученных ориентальных Paradoxosomatidae (Diplopoda: Polydesmida), XXII

Sergei I. Golovatch
С.И. Головач

[1] Institute for Problems of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospekt 33, Moscow 119071 Russia. E-mail: sgolovatch@yandex.ru

[1] Институт проблем экологии и эволюции РАН, Ленинский проспект, 33, Москва 119071 Россия.

KEY WORDS: Diplopoda, Polydesmida, Paradoxosomatidae, taxonomy, new records, China, Vietnam, Singapore, Indonesia.

КЛЮЧЕВЫЕ СЛОВА: Diplopoda, Polydesmida, Paradoxosomatidae, таксономия, новые находки, Китай, Вьетнам, Сингапур, Индонезия.

ABSTRACT. This contribution is devoted to new records of 13 known species, including nine that are illustrated, based on fresh material. Lectotype designation is made for *Gonobelus sinensis* Attems, 1936.

РЕЗЮМЕ. Данное сообщение посвящено новым находкам 13 известных видов, включая девять, для которых представлены иллюстрации по свежему материалу. Для вида *Gonobelus sinensis* Attems, 1936 выделен лектотип.

Introduction

This paper is devoted to new, mostly illustrated records of several known species of paradoxosomatid millipedes from Vietnam, Indonesia and China. The lectotype is selected for one old species from China.

Material and methods

The material is deposited in the collection of the Zoological Museum, Moscow State University, Russia (ZMUM). Pictures were taken with a Canon EOS 5D digital camera and stacked using Zerene Stacker software.

Taxonomic part

Anoplodesmus mirabilis Golovatch, VandenSpiegel et Semenyuk, 2016

Figs 1–7.

MATERIAL. 1 ♂ (ZMUM), Vietnam, Gia Lai Prov., Tay Nguyen Plateau, 65 km N of Ankhe, Buon Luoi, tropical forest, on tree, 10.VII.1984, leg. T.K. Sergeeva.

REMARKS. This species has originally been described from a single locality in the same province of central Vietnam [Golovatch et al., 2016]. The new sample is thus a near-topotype and it fully agrees with the original description. New illustrations are provided to document the species' identity (Figs 1–7).

Anoplodesmus saussurii (Humbert, 1865)

MATERIAL. 1 ♀ (ZMUM), Singapore, Bukit Timah Nature Reserve, 60 m a.s.l., N 1°21.02′, E 103°45.44′, 14.III.2014, leg. O. Gorbunov.

REMARKS. This species is probably native to southern India or Sri Lanka and was introduced to the Pacific archipelagos of Fiji and Vanuatu, as well as to Mauritius, Indian Ocean. It has recently been reported as introduced to Singapore as well [Decker, Tertilt, 2012].

Aschistodesmus signatus (Attems, 1897)

Figs 8–15.

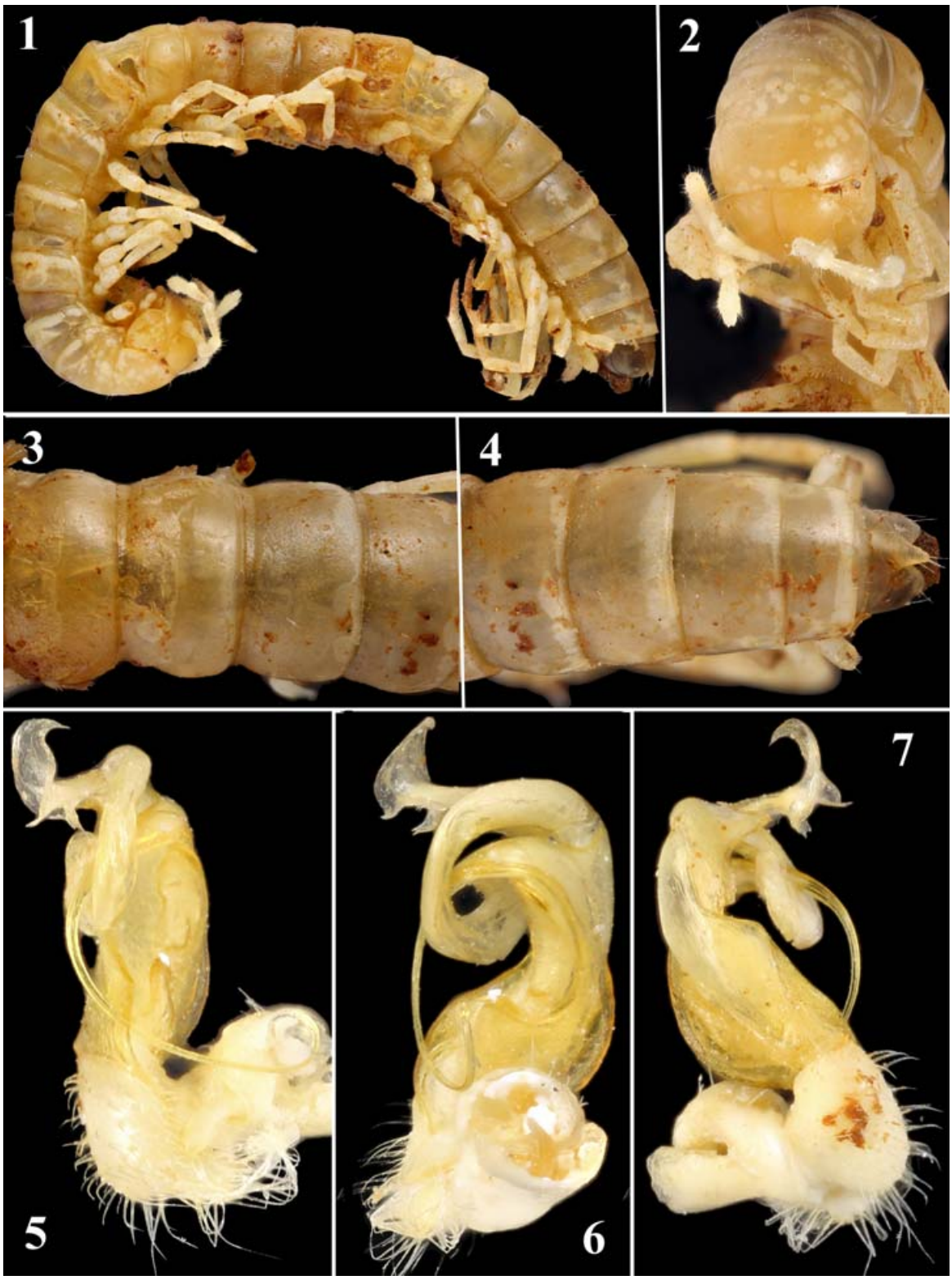
MATERIAL. 1 ♂ (ZMUM), Indonesia, W New Guinea, Doberai Peninsula, Manokwari, Gunung Meja, S 0°51′48″ –0°50′44″, E 134°04′59″–134°04′20″, 150–200 m a.s.l., primary lowland tropical rainforest on limestone, 13.IX.2015, leg. D. Telnov.

REMARKS. Jeekel [2000], in the latest account of the genus *Aschistodesmus* Pocock, 1898, not only provided excellent drawings of the gonopodal structure of *A. signatus*, but he also summarized the distribution of this rather widespread species: Halmahera; Great Kai; western New Guinea. The new sample is typical in size, ca 13 mm long, 1.4 and 2.0 mm wide on midbody pro- and metazona, respectively. New illustrations are presented to document the species' identity (Figs 8–15).

Desmoxytes grandis Golovatch, VandenSpiegel et Semenyuk, 2016

Figs 16–21.

MATERIAL. 1 ♂ (ZMUM), Vietnam, Kon Tum Prov., N 14°43.450′, E 108°18.882′, 1000–1260 m a.s.l., tropical forest, leaf litter, V.2015, leg. I.I. Semenyuk.



Figs 1–7. *Anoplodesmus mirabilis* Golovatch, VandenSpiegel et Semenyuk, 2016, ♂ from Kon Tum Province: 1 — habitus, lateral view; 2 — anterior part of body, ventral view; 3 — midbody segments, dorsal view; 4 — posterior part of body, dorsal view; 5–7 — right gonopod, mesal, subdorsal and lateral views, respectively. Pictures by K. Makarov, not taken to scale.

Рис. 1–7. *Anoplodesmus mirabilis* Golovatch, VandenSpiegel et Semenyuk, 2016, ♂ из провинции Kon Tum: 1 — общий вид, сбоку; 2 — передняя часть тела, снизу; 3 — среднетуловищные сегменты, сверху; 4 — задняя часть тела, сверху; 5–7 — правый гонопод, соответственно изнутри, почти сверху и сбоку. Фотографии К.В. Макарова, сняты без масштаба.

Figs 8–12. *Aschistodesmus signatus* (Attems, 1897), ♂ from Gunung Meja: 8 — habitus, lateral view; 9 — anterior part of body, ventral view; 10 — midbody segments, dorsal view; 11 — posterior part of body, dorsal view; 12 — segments 4–7, ventral view. Pictures by K. Makarov, not taken to scale.

Рис. 8–12. *Aschistodesmus signatus* (Attems, 1897), ♂ из Gunung Meja: 8 — общий вид, сбоку; 9 — передняя часть тела, снизу; 10 — среднетуловищные сегменты, сверху; 11 — задняя часть тела, сверху; 12 — сегменты 4–7, снизу. Фотографии К.В. Макарова, сняты без масштаба.

REMARKS. This species has originally been described from a single locality in central Vietnam [Golovatch et al., 2016]. The new sample comes from an adjacent province in the same part of the country, and is distinguished from the types by its considerably smaller size: body length ca 32 mm, width 1.7 and 2.0 mm on midbody pro- and metazona; distance between largest dorsal spines on midbody metaterga, 5.0 mm (versus 38–40, 2.4–2.7, 2.8–3.0 and 6.5–7.0 mm, respectively). In all other respects, including gonopodal structure, the fresh ♂ fully agrees with the original description. New illustrations are provided to document the species' identity (Figs 16–21).

Helicorthomorpha holstii Pocock, 1895

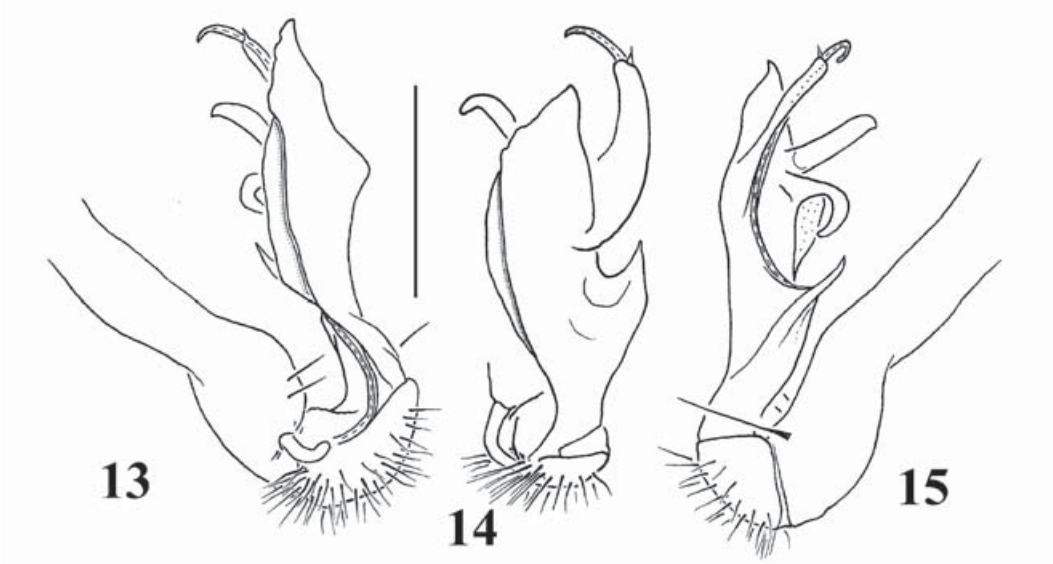
MATERIAL. 2 ♂♂, 1 ♀, 2 juv. (ZMUM ρ3519), N Vietnam, 25 km E of Hai Phong, Cat Ba Island, national park, ca 10 km NW of Cat Ba City, N 20°47′56″, E 106°59′47″, ca 40 m a.s.l., 10–24.X.2011, leg. D.N. Fedorenko.

REMARKS. This species is very common in southern China and Southeast Asia and it tends to mostly occur in disturbed habitats.

Nedyopus mahunkai (Korsós et Golovatch, 1989)
Figs 22–26.

MATERIAL. 2 ♂♂ (ZMUM), N Vietnam, 25 km E of Hai Phong, Cat Ba Island, national park, ca 10 km NW of Cat Ba City, N 20°47′56″, E 106°59′47″, ca 40 m a.s.l., 10–24.X.2011, leg. D.N. Fedorenko.

REMARKS. This species has originally been described and still remains known only from two localities in northern Vietnam [Korsós, Golovatch, 1989; Chen et al., 2006]. The new samples come from the same part of the country. New illustrations are provided to make the species more readily recognizable (Figs 22–26).

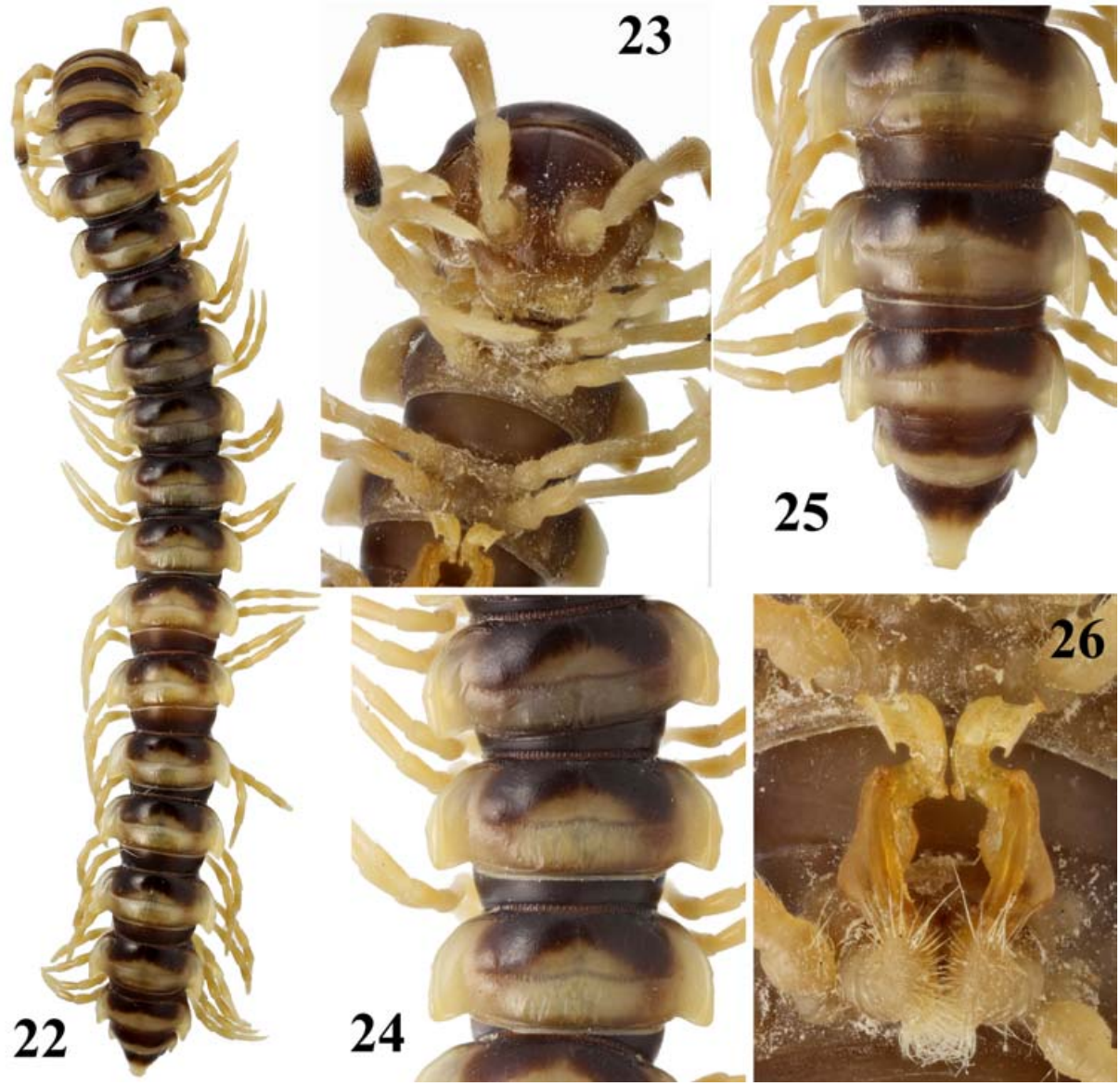


Figs 13–15. *Aschistodesmus signatus* (Attems, 1897), ♂ from Gunung Meja, left gonopod, mesal, ventral and lateral views, respectively. Scale bar: 0.5 mm.

Рис. 13–15. *Aschistodesmus signatus* (Attems, 1897), ♂ из Gunung Meja, левый гонопод, соответственно изнутри, снизу и сбоку. Масштаб: 0.5 мм.

Figs 16–21. *Desmoxytes grandis* Golovatch, VandenSpiegel et Semenyuk, 2016, ♂ from Kon Tum Province: 16 — habitus, dorsal view; 17 — anterior part of body, ventral view; 18 — midbody segments, dorsal view; 19 — posterior part of body, dorsal view; 20 — telson, ventral view; 21 — both gonopods in situ, ventral view. Pictures by K. Makarov, not taken to scale.

Рис. 16–21. *Desmoxytes grandis* Golovatch, VandenSpiegel et Semenyuk, 2016, ♂ из провинции Kon Tum: 16 — общий вид, сверху; 17 — передняя часть тела, снизу; 18 — среднетуловищные сегменты, сверху; 19 — задняя часть тела, сверху; 20 — тельсон, снизу; 21 — оба гонопода на месте, снизу. Фотографии К.В. Макарова, сняты без масштаба.



Figs 22–26. *Nedyopus mahunkai* (Korsós et Golovatch, 1989), ♂ from Cat Ba National Park: 22 — habitus, dorsal view; 23 — anterior part of body, ventral view; 24 — midbody segments, dorsal view; 25 — posterior part of body, dorsal view; 26 — both gonopods in situ, ventral view. Pictures by K. Makarov, not taken to scale.

Рис. 22–26. *Nedyopus mahunkai* (Korsós et Golovatch, 1989), ♂ из национального парка Cat Ba: 22 — общий вид, сверху; 23 — передняя часть тела, снизу; 24 — среднетуловищные сегменты, сверху; 25 — задняя часть тела, сверху; 26 — оба гонопода на месте, снизу. Фотографии К.В. Макарова, сняты без масштаба.

Orthomorpha coarctata (de Saussure, 1860)

MATERIAL. 3 ♀♀ (ZMUM ρ3509), E Indonesia, North Moluccas, central Halmahera, pond Moreala W of Weda, N 0°19′36″, E 127°49′55″, 165 m a.s.l., natural rainforest pond, in water 2–4 cm deep, 5.VII.2013; 5 ♂♂, 2 ♀♀ (ZMUM ρ3510), E Indonesia, North Moluccas, Tidore Island, Boasio, Spanish fort ruins, N 0°38′54″, E 127°26′31″, 40 m a.s.l., gardens and secondary vegetation, 29.VI.2013, all leg. D. Telnov; 1 ♀ (ZMUM), Vietnam, 20 km N of Nhatrang, sea shore, 10.III.2012, leg. T. Tuneva.

REMARKS. This is a very common pantropical millipede, definitely an anthropochore.

Sellanucheza hoffmani Nguyen, 2011
Figs 27–32.

MATERIAL. 1 ♂ (ZMUM), Vietnam, Kon Tum Prov., N 14°43.450′, E 108°18.882′, 1000–1260 m a.s.l., tropical forest, leaf litter, V.2015, leg. I.I. Semenyuk.

REMARKS. This species has originally been described from two disparate localities in central Vietnam, the holotype coming from Kon Tum Province [Nguyen, 2011]. The new sample can thus be regarded as a near-topotype, because it also comes from that

Figs 27–32. *Sellanucheza hoffmani* Nguyen, 2011, ♂ from Kon Tum Province: 27 & 28 — habitus, lateral and dorsal views, respectively; 29 — anterior part of body, ventral view; 30 — midbody segments, dorsal view; 31 — posterior part of body, dorsal view; 32 — both gonopods in situ, ventral view. Pictures by K. Makarov, not taken to scale.

Рис. 27–32. *Sellanucheza hoffmani* Nguyen, 2011, ♂ из провинции Kon Tum: 27 и 28 — общий вид, соответственно сбоку и сверху; 29 — передняя часть тела, снизу; 30 — среднетуловищные сегменты, сверху; 31 — задняя часть тела, сверху; 32 — оба гонопода на месте, снизу. Фотографии К.В. Макарова, сняты без масштаба.

province. New illustrations are provided to make the species more readily recognizable (Figs 27–32).

Kronopolites biagrilectus Hoffman, 1963
Figs 33–36.

MATERIAL. 1 ♂ (ZMUM), Yunnan Prov., Laojunshan Mts, NE Liming, 2.5 km SE of Yankuluo, N 27°3′5″, E 99°44′9″, 4.VI. 2016; 1 ♂ (ZMUM), China, Yunnan Prov., N of Lanping, 10.3 km SW of Hexi, N 26°48′28″, E 99°18′3″, 3200 m a.s.l., 9.VI.2016; 1 ♂ (ZMUM), Yunnan Prov., N of Lanping, 11.3 km SW of Hexi, N 26°48′34″, E 99°17′16″, 3600 m a.s.l., 10.VI.2016, all leg. I. Kabak & G. Davidian.

REMARKS. This is one of the most common and widespread diplopod species endemic to southern China [Golovatch, 2016a].

Kronopolites swinhoei (Pocock, 1895)

MATERIAL. 3 ♂♂, 1 ♀, 4 juv. (ZMUM), China, Shaanxi Prov., S Taibaishan Mt. Range, Tsinling Mts, Houshenzi, 1900 m a.s.l., N 33°53′, E 107°49′, 1–12.VIII.1999, leg. V. Siniaev & A. Plutenko.

REMARKS. This is one of the most common and widespread diplopod species endemic to China. It has already been recorded and illustrated, based on material coming from near Houshenzi [Golovatch, 2013a].

Sigipinius grahami Hoffman, 1961
Figs 37–50.

MATERIAL. 2 ♂♂ (ZMUM), China, Sichuan Prov., WSW of Lixian, 5.9 km SW of Shangzhai, N 31°20′54″, E 102°30′26″, 3025 m a.s.l., 15.VI.2016; 1 ♂ (ZMUM), Sichuan Prov., WSW of

Figs 33–36. *Kronopolites biagrilectus* Hoffman, 1963, ♂ from near Yankuluo: 33 — habitus, lateral view; 34–36 — right gonopod, mesal, dorsal and ventral views, respectively. Pictures by K. Makarov, not taken to scale.

Рис. 33–36. *Kronopolites biagrilectus* Hoffman, 1963, ♂ из окрестностей Yankuluo: 33 — общий вид, сбоку; 34–36 — правый гонопод, соответственно изнутри, сверху и снизу. Фотографии К.В. Макарова, сняты без масштаба.

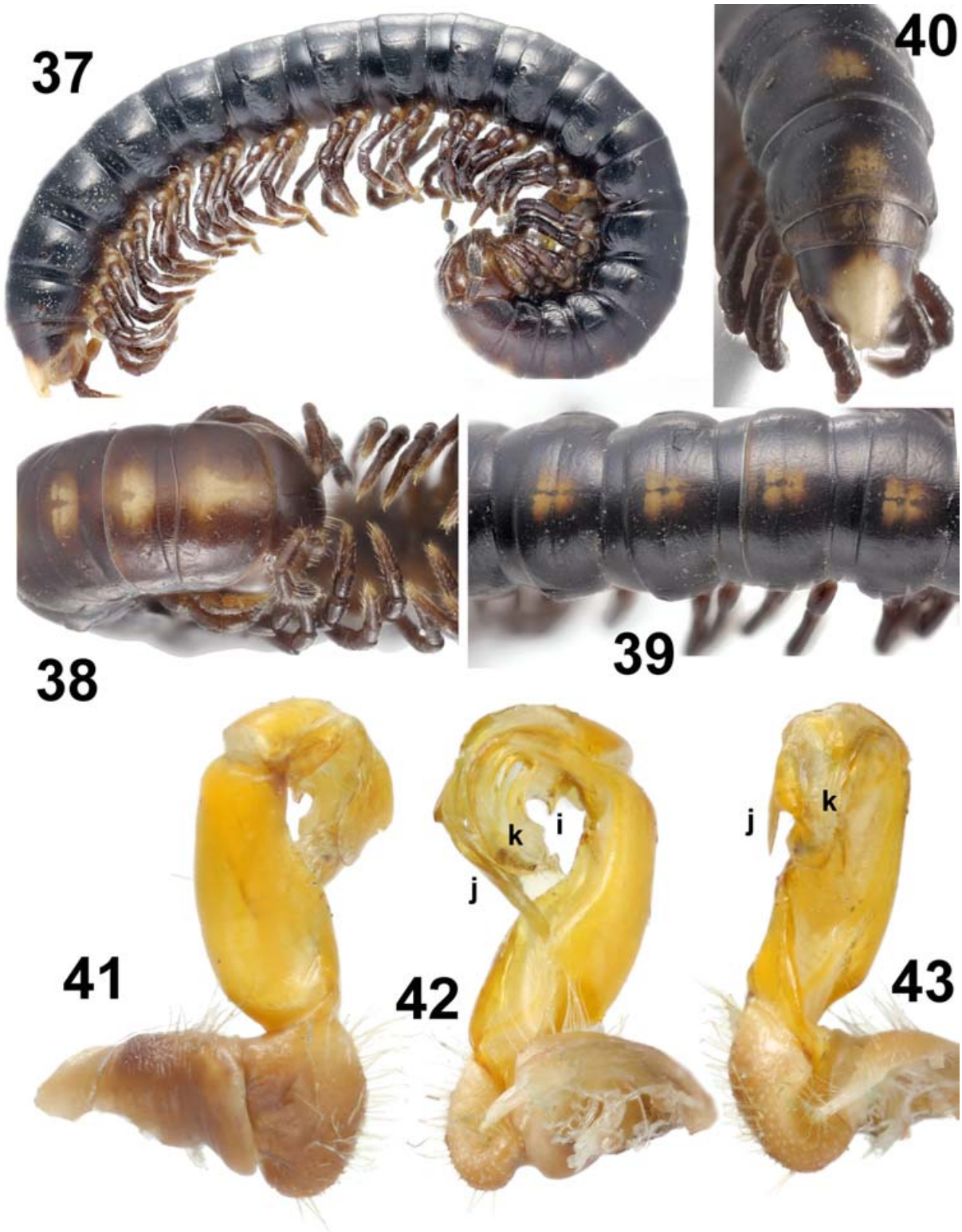
Lixian, 14.9 km SW of Shangzhai, N 31°17′51″, E 102°45′51″, 4220 m a.s.l., 19.VI.2016; 1 ♂ (ZMUM), Sichuan Prov., NE of Xiaojin, right tributary near Zuopeng, N 31°14′17″, E 102°42′46″, 3840 m a.s.l., 21.VI.2016, all leg. I. Kabak & G. Davidian; 1 ♂ (ZMUM), Sichuan Prov., WNW of Pingwu, 3.75 km NW of Huyaxiang, N 32°32′37″, E 104°1′50″, 2335 m a.s.l., 26.VI.2016; 1 ♂, 1 ♀ (ZMUM), Sichuan Prov., WNW of Pingwu, 6.1 km NW Huyaxiang, N 32°33′13″, E 104°0′30″, 3445 m a.s.l., 27.VI.2016, all leg. I. Belousov & I. Kabak.

REMARKS. This high-montane species is known only from several counties in central and south-central Sichuan [Hoffman. 1961; Golovatch, 2013b]. New illustrations (Figs 37–50) are provided to document the species' identity, including the colour pattern and body shape typical of the genus (Figs 37–40), as well as certain minor variations in solenophore structure (Figs 41–50), in particular the shapes of processes **k**, **j** and **i**. The whole genus is high-montane, endemic to China and presently it contains nine described species, including five from Sichuan [Golovatch, 2016b].

Gonobelus sinensis Attems, 1936
Figs 51–59.

MATERIAL. 1 ♂ (ZMUM), China, Yunnan Prov., Laojunshan Mts, 3.7 km ENE of Segengsheng, N 27°4′9″, E 99°31′57″, 2615 m a.s.l., 5.VI.2016, leg. I. Kabak & G. Davidian.

REMARKS. Because this species was described from an unspecified place in Yunnan, southwestern China [Attems, 1936, 1937], above is the first precise locality known to support *G. sinensis*. The type series, kept in the Naturhistorisches Museum Wien (NHMW), actually consists of three ♂♂, but neither a ♂ and a ♀,



Figs 37–43. *Sigipinius grahami* Hoffman, 1961, ♂ from WSW of Lixian: 37 — habitus, lateral view; 38 — anterior part of body, dorsal view; 39 — midbody segments, dorsal view; 40 — caudal part of body, dorsal view; 41–43 — right gonopod, lateral, dorsal and mesal views, respectively. Pictures by K. Makarov, not taken to scale.

Рис. 37–43. *Sigipinius grahami* Hoffman, 1961, ♂ из западо-юго-западных окрестностей Lixian: 37 — общий вид, сбоку; 38 — передняя часть тела, сверху; 39 — среднетуловищные сегменты, сверху; 40 — задняя часть тела, сверху; 41–43 — правый гонопод, соответственно сбоку, сверху и изнутри. Фотографии К.В. Макарова, сняты без масштаба.

Figs 44–50. *Sigipinius grahami* Hoffman, 1961, right gonopod of ♂ from WNW of Pingwu (44–47) and left gonopod of ♂ from near Zuopeng (48–50), mesal, dorsal, lateral, dorsolateral, mesal, dorsal and ventral views, respectively. Pictures by K. Makarov, not taken to scale.

Рис. 44–50. *Sigipinius grahami* Hoffman, 1961, правый гонопод ♂ из западо-северо-западных окрестностей Pingwu (44–47) и левый гонопод ♂ из окрестностей Zuopeng (48–50), соответственно изнутри, сверху, сбоку, одновременно сверху и сбоку, изнутри, сверху и снизу. Фотографии К.В. Макарова, сняты без масштаба.

as is erroneously stated in the original description [Attems, 1936], nor two ♂♂, as indicated by Golovatch [2013a]. My colleague Nesrine Akkari (NHMW) has recently authorized me to publish the only intact ♂ to serve as the lectotype (NHMW 8999), another, almost complete ♂ with a missing head as a paralectotype (NHMW 9000), whereas the slide mount containing a gnathochilarium, dissected gonopods, first leg-pair and two midbody legs of the third ♂, which Attems [1936] probably used by for his description of the species, and of which the remaining parts of the body are missing, as one more paralectotype (NHMW 3592). Lectotype designation is necessary to ensure that the species is based on the most intact specimen, even though all three types are conspecific.

In addition to several recently published colour photographs of the lectotype [Golovatch, 2013a], three new pictures are presented here, taken either from a

Figs 51–53. *Gonobelus sinensis* Attems, 1936, ♂ paralectotypes NHMW 9000 (51–52) and NHMW 3592 (53): 51 — midbody segments, dorsolateral view; 52 — segments 6–8, together with both gonopods in situ, lateral view; 53 — right gonopod, mesal view. Scale bars 1.0 (51–52) or 0.5 mm (53).

Рис. 51–53. *Gonobelus sinensis* Attems, 1936, паралектотипы ♂♂ NHMW 9000 (51–52) и NHMW 3592 (53): 51 — среднетуловищные сегменты, одновременно сверху и сбоку; 52 — сегменты 6–8 вместе с гоноподами на месте, сбоку; 53 — правый гонопод, изнутри. Масштаб 1,0 (51–52) или 0,5 мм (53).

likewise submerged NHMW 9000 paralectotype (Figs 51–52) or from the NHMW 3592 paralectotype slide (Fig. 53). They show quite clearly that the paralectotype torso has the metatergal texture as rough as that observed in the fresh sample (cf. Figs 51 and 56–57). The gonopodal structure is nearly identical as well, only the distal part of the solenophore in both paralectotypes is slightly less strongly coiled (cf. Figs 52–53 and 58–59). Due to the long-term conservation in alcohol, the types are considerably faded (Figs 51–52) compared to the new ♂ which is mainly dark chocolate brown (Figs 54–57).

Gonobelus Attems, 1936 is still another montane genus endemic to China. At present, it comprises only four species: *G. sinensis* (the type species) from Yunnan, *G. martensi* Golovatch, 2013 from Shaanxi, as well as *G. belousovi* Golovatch, 2014 and *G. pentaspinus* Golovatch, 2013, both from Sichuan [Golovatch, 2013a, b, 2014].

Hedinomorpha montana Golovatch, 2016
Figs 60–81.

MATERIAL. 1 ♂, 2 ♀♀ (ZMUM), China, Yunnan Prov., NW of Jianchuan, 4.7 km WNW of Damaidi, N 26°39′37″, E 99°46′44″, 3310 m a.s.l., 19.V.2016; 1 ♂ (ZMUM), Yunnan Prov., Laojunshan Mts, NE of Liming, 4.2 km S of Muzhengdu, N 27°6′34″, E 99°45′3″, 3695 m a.s.l., 3.VI.2016, all leg. I. Kabak & G. Davidian.

REMARKS. The new samples agree quite well with the original description [Golovatch, 2016b] and, because they stem from the same high-montane region of Yunnan, they may be referred to as near-topotypes. Still there are minor variations, rather individual or populational, observed in the shapes of the epiproct and sternal lobe between ♂ coxae 4, as well as in ♂ leg and gonopodal structure (Figs 60–81). Thus, the ♂ from near Damaidi shows ventral brushes not only in the distal part of the tibiae, which seems to be a typical condition [Golovatch, 2016b]. but all over the segment's ventral surface (cf. Figs 67 and 78). Similarly,

Figs 54–59. *Gonobelus sinensis* Attems, 1936, ♂ from Laojunshan Mts: 54 — habitus, lateral view; 55 — anterior part of body, frontoventral view; 56 — midbody segments, dorsal view; 57 — caudal part of body, dorsal view; 58–59 — left gonopod, dorsal and mesal views, respectively. Pictures by K. Makarov, not taken to scale.

Рис. 54–59. *Gonobelus sinensis* Attems, 1936, ♂ из гор Laojunshan: 54 — общий вид, сбоку; 55 — передняя часть тела, одновременно сверху и снизу; 56 — среднетуловищные сегменты, сверху; 57 — задняя часть тела, сверху; 58–59 — правый гонопод, соответственно сверху и изнутри. Фотографии К.В. Макарова, сняты без масштаба.

Figs 60–63. *Hedinomorpha montana* Golovatch, 2016, ♂ from near Damaidi: 60 — habitus, lateral view; 61 — anterior part of body, dorsal view; 62 — midbody segments, dorsal view; 63 — caudal part of body, dorsal view. Pictures by K. Makarov, not taken to scale.

Рис. 60–63. *Hedinomorpha montana* Golovatch, 2016, ♂ из окрестностей Damaidi: 60 — общий вид, сбоку; 61 — передняя часть тела, сверху; 62 — среднетуловищные сегменты, сверху; 63 — задняя часть тела, сверху. Фотографии К.В. Макарова, сняты без масштаба.

the shape and armament of lobe **k** on the solenophore varies from subtriangular and non-fringed at margins, as seen in the types [Golovatch, 2016b], to subtriangular and fringed only apically (Figs 78–81) or roundish and fringed nearly all along its margins (Figs 68–70).

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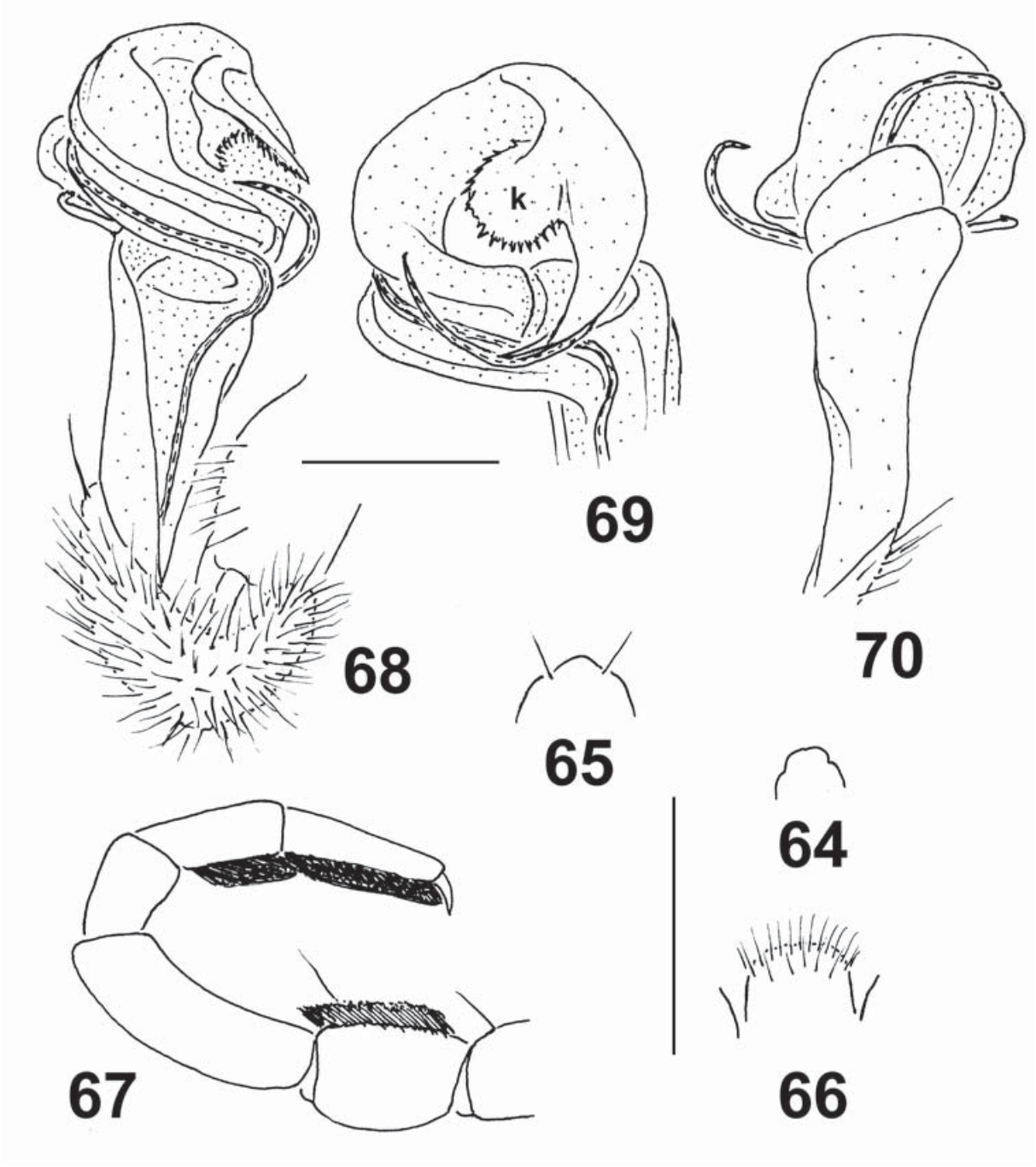


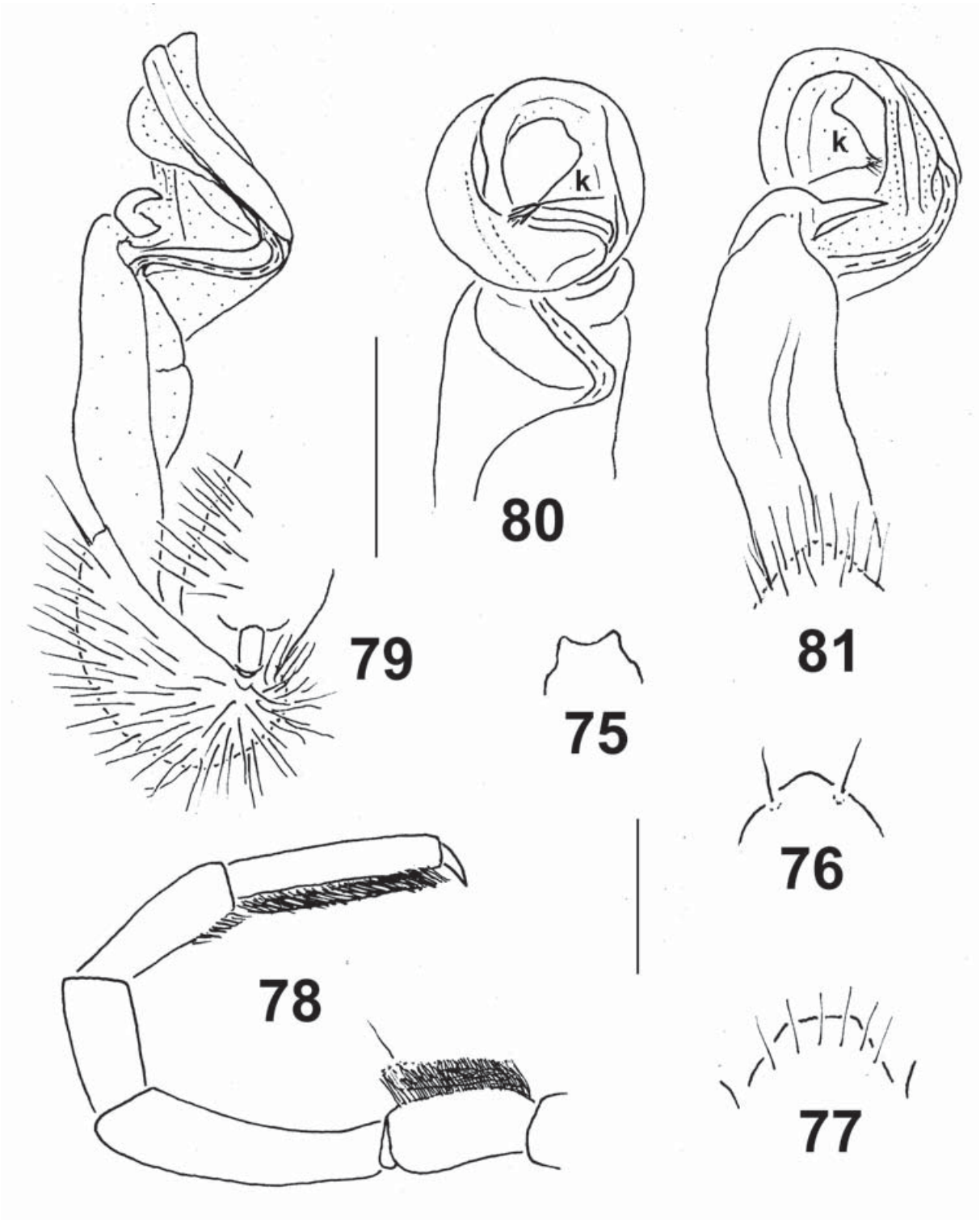
Figs 64–70. *Hedinomorpha montana* Golovatch, 2016, ♂ from near Damaidi: 64 — tip of epiproct, dorsal view; 65 — hypoproct, ventral view; 66 — sternal lobe between coxae 4, caudal view; 67 — leg 7, caudal view; 68–70 — right gonopod, mesal, dorsal and lateral views, respectively. Scale bars 1.0 (64–67) and 0.5 mm (68–70).

Рис. 64–70. *Hedinomorpha montana* Golovatch, 2016, ♂ из окрестностей Damaidi: 64 — кончик эпипрокта, сверху; 65 — гипопрокт, снизу; 66 — стернальная пластина между тазиками 4, сзади; 67 — нога 7, сзади; 68–70 — правый гонопод, соответственно изнутри, сверху и сбоку. Масштаб 1,0 (64–67) и 0,5 мм (68–70).

tures (Figs 51–53) obtained from the paralectotypes in order to compare them with the fresh sample documented above. Thanks are likewise due to Kirill Mikhailov and Elena Kudryavtseva (both ZMUM) who helped me incorporate the ZMUM samples into the collection. Both Irina I. Semenyuk and Dmitri Fedorenko extend their gratitude to the Russia-Vietnam Joint Tropical Centre which supported their collecting trips to Vietnam.

Figs 71–74. *Hedinomorpha montana* Golovatch, 2016, ♂ from near Muzhengdu: 71 — habitus, lateral view; 72 — anterior part of body, frontoventral view; 73 — midbody segments, dorsal view; 74 — caudal part of body, dorsal view. Pictures by K. Makarov, not taken to scale.

Рис. 71–74. *Hedinomorpha montana* Golovatch, 2016, ♂ из окрестностей Muzhengdu: 71 — общий вид, сбоку; 72 — передняя часть тела, одновремено спереди и снизу; 73 — среднетуловищные сегменты, сверху; 74 — задняя часть тела, сверху. Фотографии К.В. Макарова, сняты без масштаба.



Figs 75–81. *Hedinomorpha montana* Golovatch, 2016, ♂ from near Muzhengdu: 75 — tip of epiproct, dorsal view; 76 — hypoproct, ventral view; 77 — sternal lobe between coxae 4, caudal view; 78 — leg 7, caudal view; 79–81 — right gonopod, mesal, dorsal and ventral views, respectively. Scale bars 0.5 mm.

Рис. 75–81. *Hedinomorpha montana* Golovatch, 2016, ♂ из окрестностей Muzhengdu: 75 — кончик эпипрокта, сверху; 76 — гипопрокт, снизу; 77 — стернальная пластина между тазиками 4, сзади; 78 — нога 7, сзади; 79–81 — правый гонопод, соответственно изнутри, сверху и снизу. Масштаб 0,5 мм.

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