

## Nomenclatorial and taxonomic notes on poorly known spiders (Arachnida: Aranei) from Siberia and Middle Asia

### Номенклатурные и таксономические заметки о малоизвестных пауках (Arachnida: Aranei) Сибири и Средней Азии

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КЛЮЧЕВЫЕ СЛОВА: Araneae, *Aculepeira*, *Haplodrassus*, *Arctosa*, новая комбинация, новый синоним.

ABSTRACT. Four species described from Siberia and Kyrgyzstan are synonymized: *Araneus aralis* Bakhvalov, 1981 syn.n. = *Aculepeira armida* (Audouin, 1826), *Haplodrassus hiemalis* (Emerton, 1909) syn.n. = *Haplodrassus stuxbergi* (L. Koch, 1879), *Haplodrassus simplex* (Kulczyński, 1926) syn.n. = *Haplodrassus moderatus* (Kulczyński, 1897) and *Alopecosa albonotata* (Schmidt, 1895) syn.n. = *Arctosa alpigena* (Doleschall, 1852). One new combination, *Aculepeira sogdiana* (Charitonov, 1969) comb.conf. (ex *Araneus*), is confirmed; this species was described based on both sexes, not only by females as indicated in WSC [2023].

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РЕЗЮМЕ. Сведены в синонимы четыре видовых названия пауков, описанных из Сибири и Киргизии: *Araneus aralis* Bakhvalov, 1981 syn.n. = *Aculepeira armida* (Audouin, 1826), *Haplodrassus hiemalis* (Emerton, 1909) syn.n. = *Haplodrassus stuxbergi* (L. Koch, 1879), *Haplodrassus simplex* (Kulczyński, 1926) syn.n. = *Haplodrassus moderatus* (Kulczyński, 1897) и *Alopecosa albonotata* (Schmidt, 1895) syn.n. = *Arctosa alpigena* (Doleschall, 1852). Подтверждена комбинация *Aculepeira sogdiana* (Charitonov, 1969) comb.conf. (ex *Araneus*), этот вид был описан по обоим полам, а не только по самке, как указано в мировом каталоге пауков [WSC, 2023].

## Introduction

While cataloguing the spiders of the former Soviet Union [Mikhailov, 1997, 2013, 2022] and conducting surveys in different regions [Marusik *et al.*, 1992, 1993, 2002a,b, etc.], we encountered difficulties in determining the status of several species that were known only from the original descriptions. Combining our experience in taxonomy and distribution of spiders in specific regions, we managed to address problems regarding two of these species. Additionally, we discovered that four species, which were previously classified under *Araneus* Clerck, 1758, actually belong to *Aculepeira* Chamberlin and Ivie, 1942. The purpose of this paper is to present our findings regarding new transfers and synonymies among spiders found in the Asian part of the former Soviet Union.

## Taxonomic survey

### Family Araneidae

#### *Aculepeira armida* (Audouin, 1826)

*Epeira armida* Audouin, 1826: 337, pl. 2, fig. 8 (♀).  
*Aculepeira armida*: Levi, 1977: 236, figs 208–217 (♂♀).  
*Araneus aralis* Bakhvalov, 1981: 137, fig. 1 (♀). **Syn.n.**  
*Aculepeira armida*: Levy, 1998: 329, figs 68–79 (♂♀).  
For complete list of references see WSC [2023].

NOTE. The spider collection of the late V.F. Bakhvalov (Bishkek, Kyrgyzstan) kept at his home is lost, making it impossible to examine his types. It is noteworthy that out of the 21 species described by Bakhvalov, only one, *Hypsosinga turkmenica* Bakhvalov, 1978, was described based on both sexes. The descriptions of the remaining 20 species are

solely based on females, with five names having been synonymized and three species transferred from *Araneus* to other genera. It is worth mentioning that the overall body shape depicted in the habitus figures of all species described by Bakhvalov appears highly elongated compared to real spiders, resembling certain species of *Larinia* Simon, 1874. Furthermore, the illustrations of the epigynes provided by Bakhvalov are highly schematic and mostly presented either in ventral or posterior view.

COMMENTS. *Araneus aralis* is known by a single taxonomic entry [WSC, 2023]. It was described based on the holotype female and six juvenile paratypes from Aral Village in Kyrgyzstan (ca. 42°54'N 73°54'E), not from the Aral Sea. The verbal description of the ventral abdominal pattern states that the venter bears a light median band resembling an exclamation mark, along with two pairs of white spots near the spinnerets. This pattern indicates that it belongs to *A. armida* (see fig. 211 in Levi [1977]). As a result, we synonymize the two names.

#### *Aculepeira sogdiana* (Charitonov, 1969) **comb.conf.**

*Araneus sogdianus* Charitonov, 1969: 79, fig. 2 (♂♀).

*Aculepeira sogdiana*: Mikhailov, 1997: 112 (new combination).

COMMENTS. This species is currently known by a single taxonomic entry in WSC [2023], in which it was indicated that it is known only from females. In fact, it was described based on two dozens of syntypes of both sexes from southeastern Uzbekistan, although only the epigyne was illustrated. The transfer of this species from *Araneus* to *Aculepeira* Chamberlin and Ivie, 1942, by Mikhailov [1997] did not include any comments or indications of a new nomenclatorial act, leading to its oversight or exclusion from WSC [2023]. Upon examining the description and figure provided by Charitonov [1969], e.g. comparison with two species belonging to the genus, *A. ceropegia* (Walckenaer, 1802) and *A. septentrionalis* (Kulczyński, 1908) (= *A. packardii* [Thorell, 1875]) and triangle shaped tip of the scape, it becomes evident that this species unequivocally belongs to *Aculepeira*.

#### Family Gnaphosidae

##### *Haplodrassus stuxbergi* (L. Koch, 1879)

*Drassus stuxbergi* L. Koch, 1879: 87, pl. 3, fig. 6 (♀).

*Drassus hiemalis* Emerton, 1909: 218, pl. 9, fig. 1 (♂♀). **Syn.n.**

*Drassodes stuxbergi*: Kulczyński, 1916: 2, pl. 1, fig. 1 (♀).

*Haplodrassus stuxbergi*: Holm, 1973: 103 (new combination).

*Haplodrassus hiemalis*: Platnick, Shadab, 1975: 7, figs 1–8 (♂♀); Marusik, Logunov, 1995: 192, figs 71–75 (♂♀); Paquin, Dupérré, 2003: 78, figs 676–678 (♂♀); Murphy, 2007: 58, figs 480–481 (♂♀).

For complete list of references see WSC [2023].

COMMENTS. *Drassus hiemalis* is the type species of the genus. *Drassus stuxbergi* was described based on two syntype females from Selivaninskoj (=Selivaninskoye, 65° 55'N), a village near Turukhansk. The types of this species were not located [Holm, 1973]. However, the figure provided by L. Koch [1879] leaves no doubt that it is conspecific with the widely distributed *H. hiemalis*, and therefore, these two names should be synonymized. In addition to the similarity in epigynes, there is further evidence supporting the synonymization of *H. hiemalis*: it is the sole member of the genus found in the northern regions of Middle Siberia. The

name *Haplodrassus stuxbergi* cannot be considered a *nomen oblitum* since it is used, at least in Kulczyński [1916], as well as in several catalogues (as mentioned above). *Haplodrassus hiemalis* is the northernmost species of the genus, with records extending up to 68°50'N latitude along the Yenisei River [Marusik et al., 2002b]. Furthermore, it has been found in eastern Yakutia at even higher latitudes, reaching 70°35'N [Marusik et al., 2002a].

##### *Haplodrassus moderatus* (Kulczyński, 1897)

*Drassus moderatus* Kulczyński in Chyzer & Kulczyński, 1897: 216, pl. 8, fig. 60 (♀).

*Drassodes simplex* Kulczyński, 1926: 39, pl. 2, fig. 4 (♀). **Syn.n.**

*Haplodrassus moderatus*: Grimm, 1985: 145, figs 154, 174–175 (♂♀); Marusik, Logunov, 1995: 192, figs 76–80 (♂♀).

*Haplodrassus simplex*: Mikhailov, 2013: 172.

For complete list of references of *H. moderatus* see WSC [2023].

COMMENTS. *Drassodes simplex* was described based on a single subadult female (with developed epigyne) from southern Kamchatka. Kulczyński [1926, p. 40] pointed out the affinity of this species with *H. stuxbergi* and *H. moderatus*, but did not consider the latter two as conspecific. However, the figure provided by Kulczyński [1926] depicting the angled posterior part of the epigynal fovea, leaves no doubt that *H. moderatus* and *H. simplex* are synonymous. *Haplodrassus moderatus* was reported in Kamchatka by Marusik & Khruleva [2011] and Marusik & Nekhaeva [2020]. The differences between the two sibling species, *H. moderatus* and *H. stuxbergi* (as *H. hiemalis* in that time), are shown by Marusik & Logunov [1995].

#### Family Lycosidae

##### *Arctosa alpigena* (Doleschall, 1852)

*Lycosa alpigena* Doleschall, 1852: 643 (Diagnosis).

*Lycosa albonotata* Schmidt, 1895: 461 (♂). **Syn.n.**

*Tricca alpigena*: Lugetti, Tongiorgi, 1965: 212, figs XVI.1–3, XVII.1–2 (♂♀).

*Arctosa alpigena*: Dondale, Redner, 1990: 290, figs 466–474 (♂♀).

*Alopecosa albonotata*: Mikhailov, 2013: 115.

For complete list of references see WSC [2023].

COMMENTS. *Lycosa albonotata* was described based on two syntype males collected from Monyero River, a right tributary of Khatanga River, in the NE part of Krasnoyarsk Prov. (ca 66°26'N). No figures were provided to illustrate the habitus or copulatory organs. According to Schmidt [1895], the types should be in the Zoological Institute in St. Petersburg. However, like many other specimens from P. Schmidt's collection (as noted by Zyuzin [1979]), they were not found there. Considering the name, description (including color and size), and the known species in the region, it becomes evident that Schmidt [1895] likely dealt with *A. alpigena*, the only species in Middle Siberia that features a prominent white cordial mark on the abdomen. Consequently, we propose the synonymization of these two names.

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