

Aelurillus ater (Kroneberg, 1875) and related species of jumping spiders in the fauna of Middle Asia and the Caucasus (Aranei: Salticidae)

Aelurillus ater (Kroneberg, 1875) и родственные виды пауков-скакунчиков в фауне Средней Азии и Кавказа (Aranei: Salticidae)

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KEY WORDS: Salticidae, *Aelurillus ater*, related species, description, synonymy.

КЛЮЧЕВЫЕ СЛОВА: Salticidae, *Aelurillus ater*, близкие виды, описания, синонимия.

ABSTRACT: Six species of the genus *Aelurillus* from Middle Asia and the Caucasus are treated. One species, *A. dubatolovi* sp.n. (♂♀), is described as new. The previously unknown sexes of *A. brutus* Wesolowska, 1996 (♂) and *A. nenilini* Azarkina, 2002 (♀) are described. *A. azerbaijzanicus* Dunin, 1984 is synonymized with *A. muganicus* Dunin, 1984. Distribution maps are provided for all species described. *A. lutosus* (Tyschchenko, 1965) is included for comparative purposes.

РЕЗЮМЕ: Рассмотрены шесть видов из рода *Aelurillus* из Средней Азии и Закавказья. Один вид, *A. dubatolovi* sp.n. (♂♀), описан как новый. Незвестные пола описаны для *A. brutus* Wesolowska, 1996 (♂) и *A. nenilini* Azarkina, 2002 (♀). *A. azerbaijzanicus* Dunin, 1984 синонимизирован с *A. muganicus* Dunin, 1984. Даны (пере)описания и карты распространения для всех видов.

Introduction

This paper considers six species of the genus *Aelurillus* recorded from Middle Asia and the Caucasus. Males of three species: *A. ater* (Kroneberg, 1875), *A. brutus* Wesolowska, 1996 and *A. dubatolovi* sp.n., are similar in the structure of their copulatory organs and general appearance; the females are indistinguishable morphologically, but can be separated by their distribution. Therefore, only distinguishing characters of males are provided for these species in the table 1. *A. lutosus* (Tyschchenko, 1965), mainly distributed in N-Kazakhstan, is considered for comparative purposes.

The previously unknown sexes of *A. brutus* Wesolowska, 1996 (♂) and *A. nenilini* Azarkina, 2002 (♀) are described. *A. azerbaijzanicus* Dunin, 1984 described from a single female is newly synonymized with *A. muganicus* Dunin, 1984 because the copulatory organs and general appearance of these species are identical.

Material and methods

This work is based on museum collections and new material collected from Azerbaijan and Middle Asia. A total of 431 specimens were examined. Specimens for this study were borrowed from, or distributed among, the following museums: ISEA — Siberian Zoological Museum of the Institute for Systematics and Ecology of Animals, Novosibirsk, Russia; MMUM — The Manchester Museum, The University of Manchester, Manchester, UK; PSU — Department of Zoology of the Perm State University, Perm, Russia; ZISP — The Zoological Institute of the Russian Academy of Science, St. Petersburg, Russia; ZMMU — Zoological Museum of the Moscow State University, Moscow, Russia; SMNH — Swedish Museum of Natural History, Stockholm, Sweden.

In most cases the names of collectors are abbreviated as follows: A.F. — Mr. A.A. Fyodorov; A.N. — Dr. A.B. Nenilin; A.Z. — Dr. A.A. Zyuzin; C.T. — Dr. Ch.K. Tarabaev; D.P. — Dr. D.D. Piryulin; D.L. — Dr. D.V. Logunov; E.G. — Dr. E.F. Guseinov; L.M. — Dr. L.A. Mitroshina; O.L. — Mr. O.V. Lyakhov; P.D. — Dr. P.M. Dunin; S.O. — Mr. S.V. Ovchinnikov; T.P. — Dr. T.V. Pavlenko; V.D. — Dr. V.V. Dubatolov.

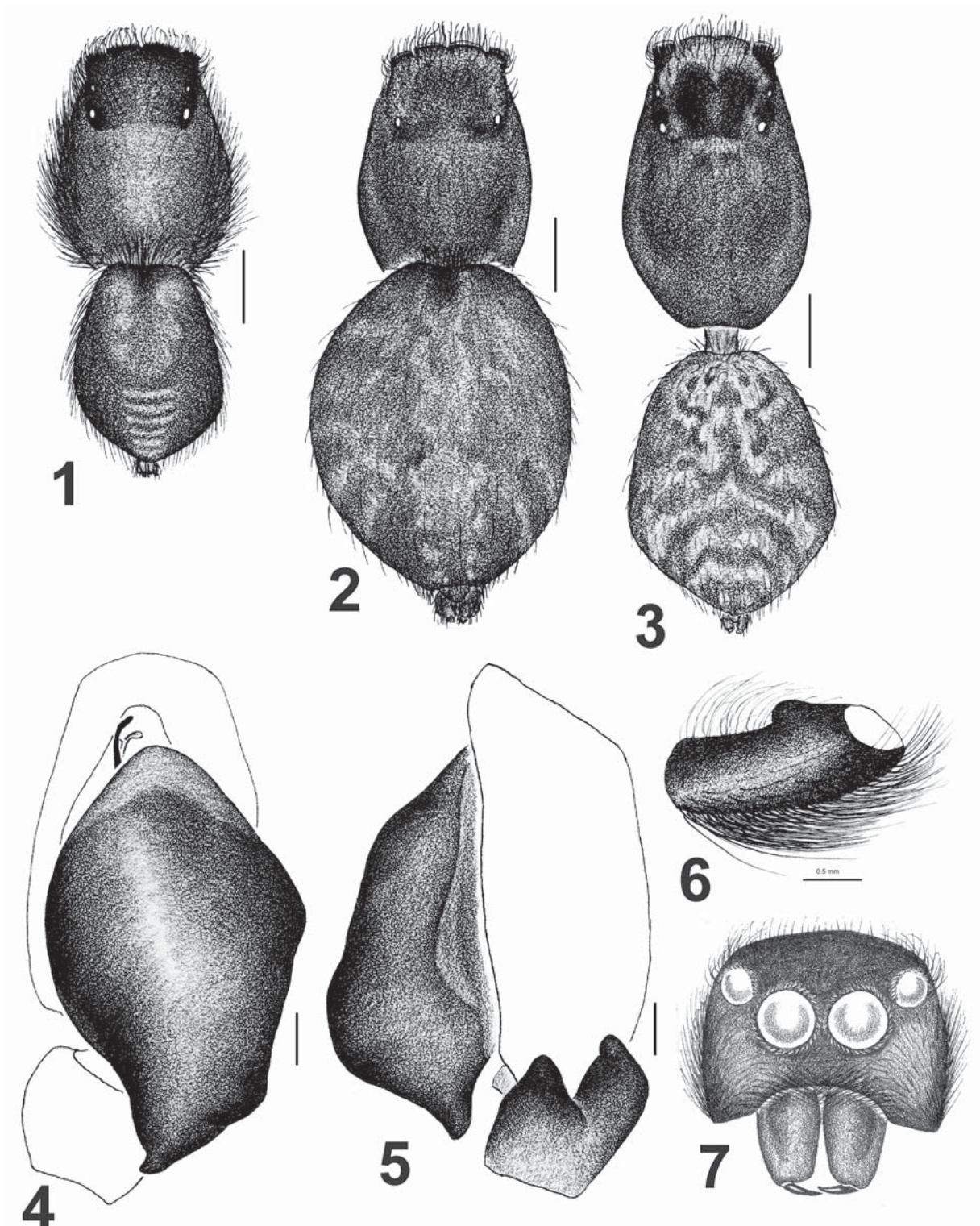
Abbreviations used in the text: AME — anterior median eyes, ALE — anterior lateral eyes, ap. — apically, d. — dorsally, Fm — femur, Mt — metatarsus, PLE — posterior lateral eyes, pr. — prolaterally, Pt — patella, rt. — retrolaterally, Tb — tibia, v. — ventrally. The sequence of leg segments in measurement data is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are in mm. For the leg spination the system adopted is that used by Ono [1988].

Taxonomic survey

Aelurillus ater (Kroneberg, 1875)
Figs 1–15, Table 1.

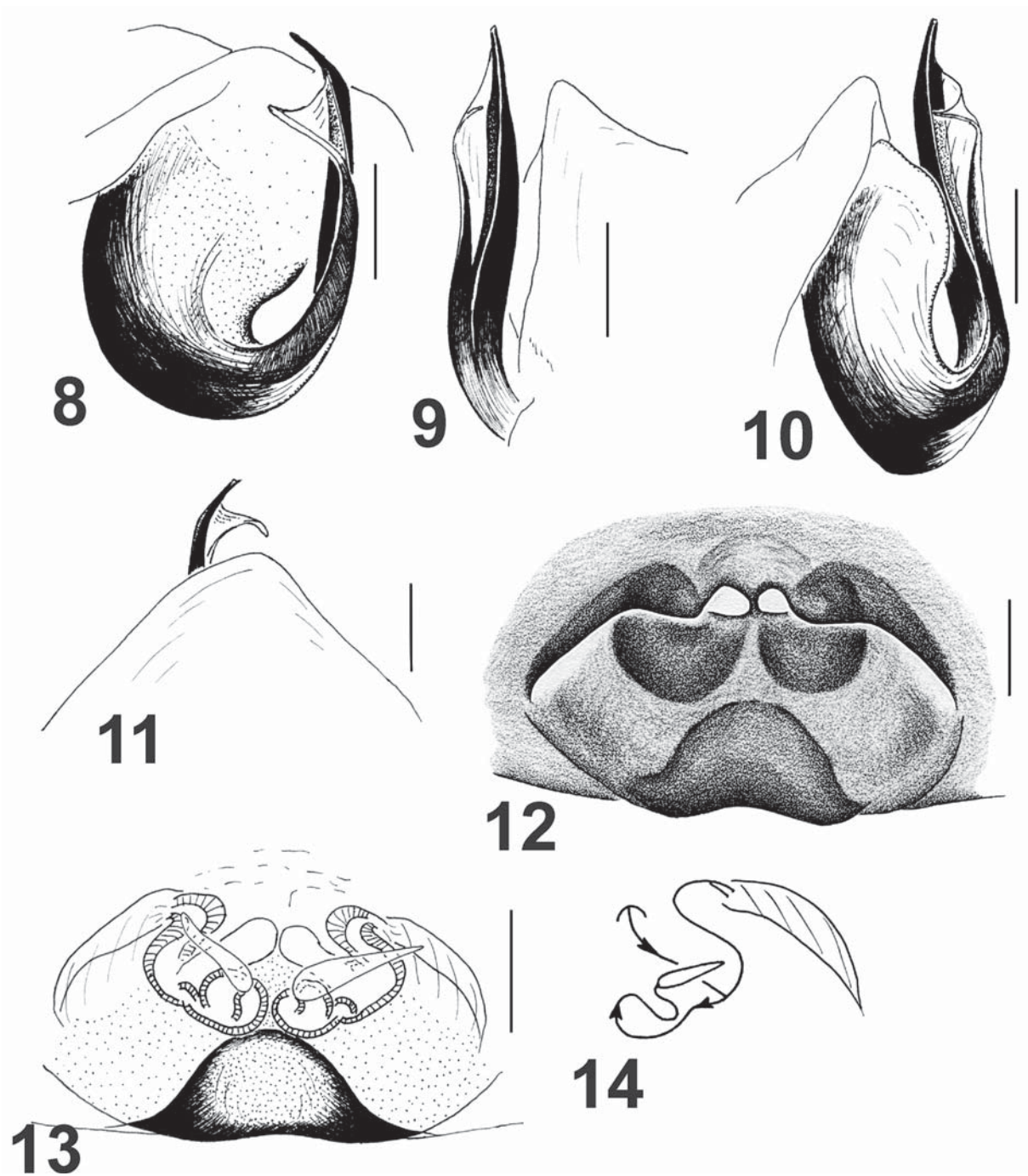
Aelurops ater Kroneberg, 1875: 50, pl. 5, f. 38 (D♂; the ♂ holotype from ZMMU; examined)

Aelurillus ater: Andreeva, 1971: 14; Andreeva, 1975: 339; Andreeva, 1976: 83, figs. 91–93; Ovtsharenko & Fet, 1980: 444; Nenilin, 1984a: 133; Nenilin, 1984b: 10; Nenilin, 1985: 130; Mikhailov & Fet, 1994: 516.



Figs 1-7. *Aelurillus ater*: 1 — ♂ habitus (holotype); 2, 3 — ♀ habitus (2 — Toshkent, 3 — Arys'); 4 — ♂ palp, ventral view (Pyandzh Karatau Mt. Range); 5 — ditto, prolateral view; 6 — ♂ palpal femur, lateral view; 7 — face (holotype). Scale: 1-3 — 10 mm, 4-5 — 0.1 mm, 6 — 0.5 mm.

Рис. 1-7. *Aelurillus ater*: 1 — габитус самца (голотип); 2, 3 — габитус самок (2 — окр. Ташкента, 3 — Арысь); 4 — пальпус самца, вентрально (Пянджинский Каратау); 5 — то же, пролатерально; 6 — бедро пальпуса самца, вид сбоку; 7 — фэйс (голотип). Масштаб: 1-3 — 10 мм, 4-5 — 0,1 мм, 6 — 0,5 мм.

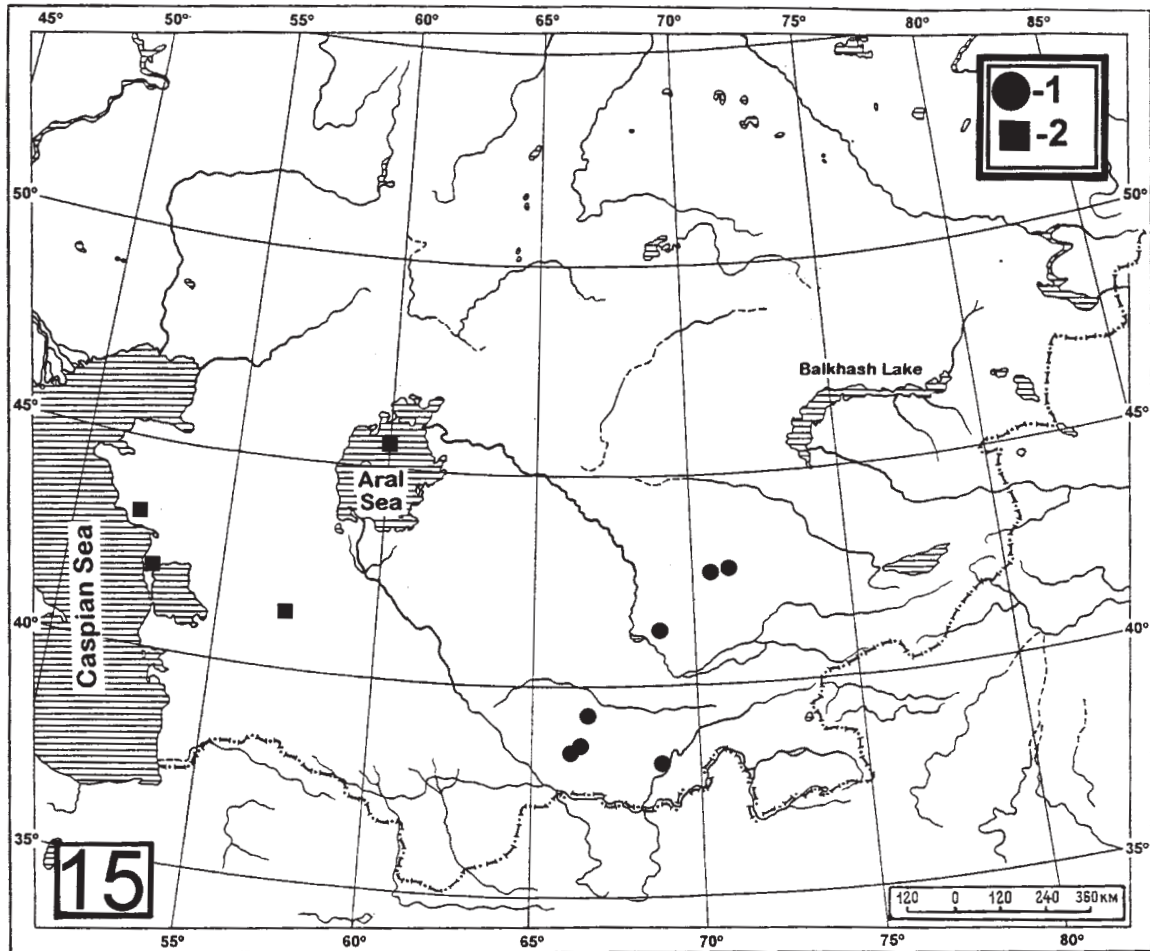


Figs 8–14. *Aelurillus ater*: 8 — embolar division, dorsal view (Karatau Mt. Range); 9 — ditto, proteral view; 10 — ditto, retrolateral view; 11 — ditto, ventral view; 12 — epigyne (Tashkent); 13 — spermatecae; 14 — schematic course of insemination ducts. Scale: 0.1 mm.

Рис. 8–14. *Aelurillus ater*: 8 — эмболярный отдел, дорзально (хр. Каратау, Казахстан); 9 — то же, пролатерально; 10 — то же, ретролатерально; 11 — то же, вентрально; 12 — эпигина, вид сверху (окр. Ташкента); 13 — сперматека; 14 — схема копуляторных каналов. Масштаб: 0,1 мм.

MATERIAL. UZBEKISTAN: 1 ♂ (the holotype, ZMMU, Ta-1051), Tashkent, 4.06. (Fedchenko); 2 ♂♂, 1 ♀ (ZMMU), Samarkand Area, near Agalyk, Ken-Kutan canyon, on stones, 8.04.1979 (A.N.); 3 ♂♂, 11 ♀♀ (PSU), Bukhara Area, near Yakkabag, 730–850 m a.s.l., 29.03.1942 (D. M. Fedotov); 8 ♂♂, 5 ♀♀ (PSU), Kashka-Dar'ya Area, Yakkabag Distr., near Ishkent,

03–04.1942 (D. M. Fedotov); 1 ♂ (ZMMU), near Tashkent, Boz-Su River, meadow, 6.04.1980 (A.N.); 1 ♀ (ZMMU), ca 80 km NE of Tashkent, valley of Keksu River, near Burchmulla, N slope, 1.05.1986 (S. Kurbatov); 1 ♀ (ISEA), Kashkadar'ya Area, ca 50 km SE of Guzar Town, 15.05.1994 (A.Z.); 2 ♂♂ (MMUIM), Zeravshan Mt. Range, near Ruskishlak and Kainarbulak, 10.09.1991

Figs 15. Distribution of *Aelurillus ater* (1) and *A. brutus* (2).Рис. 15. Распространение *Aelurillus ater* (1) и *A. brutus* (2).Table 1. Diagnostic morphological characters of the three closely-related species of *Aelurillus*.
Таблица 1. Диагностические морфологические признаки трёх близких видов рода *Aelurillus*.

Character	<i>A. ater</i>	<i>A. brutus</i>	<i>A. dubatolovi</i> sp.n.
1. Colour of clypeal hairs	dark brown	white	white
2. Colour of hairs on palpal femur	dark brown	white	greyish/brownish white
3. Hairs on carapace sides	dense and long, dark brown	sparse and short, brownish white	sparse and long, dark brown
4. Dorsum	dark brown, with no colour pattern	brown, with colour pattern	dark brown, with no colour pattern
5. Leg femora hairs	dense and long, dark brown	sparse and long, dark and light brown/white	dense (SW part of area) and sparse (NE part of area), long, dark brown

(S.O.). — KAZAKHSTAN: 2♂♂, 2♀♀ (ISEA), Karatau Mt. Range, mountain slopes near River Kulan (on the ground), 12.04.1988 (C.T.), 6♂♂, 3♀♀ (ISEA), South-Kazakhstan [=Shymkent, Chimkent] Area, Baraldy Tau Mt. Range, valley of Zhilandy River, on the ground, grasses, 13.04.1988 (C.T.); 1♀ (ISEA), South-Kazakhstan [=Shymkent, Chimkent] Area, Baraldaitau Mt. Range, canyon of Baraldy River, under stones, on the slopes, 16.04.1988 (C.T.); 1♂ (ISEA), South-Kazakhstan [=Chimkent, Shymkent] Area, Karatau Mt. Range, Kon-Bu canyon, 5.05.1984

(A. V. Abramov); 1♂ (ZMMU), South-Kazakhstan [=Chimkent, Shymkent] Area, near Chernyaevka, hill steppe (on the ground), 14.04.1980 (A.N.); 5♂♂, 1♀ (ISEA), South-Kazakhstan [=Shymkent, Chimkent] Area, near Arys', Argynsai, 1.10.1993 (A. V. Gromov). — TAJIKISTAN: 2♂♂ (ISEA), Pyandzhinskii Karatau Mt. Range, Astana Mt., 1300 m a.s.l., 23.04.1991 (S.O.).

DIAGNOSIS. This species is similar to *Aelurillus brutus*, *A. dubatolovi* sp.n. and *A. lutosus*, but can be distinguished

from all of them by the dark hairs on the male clypeus and femora (Figs. 6–7, Table 1), as well as the stronger embolus and its terminal apophysis (Figs. 8–11, 56–58).

DISTRIBUTION. Uzbekistan, Kazakhstan, Tajikistan (Fig. 15).

DESCRIPTION. MALE (holotype). Measurements. Carapace 3.1 long, 2.1 wide, 1.5 high at PLE. Ocular area 1.1 long, 1.5 wide anteriorly, 1.4 wide posteriorly. Diameter of AME 0.45. Abdomen 2.4 long, 1.9 wide. Cheliceral length 0.7. Clypeal height 0.3. Length of leg segments: leg I — 1.5 + 0.9 + 0.9 + 0.7 + 0.65; leg II — 1.5 + 0.9 + 0.85 + 0.7 + 0.65; leg III — 2.1 + 1.0 + 1.1 + 1.4 + 0.75; leg IV — 1.9 + 1.0 + 1.0 + 1.5 + 0.8. Leg spination. Leg I: Fm d.0-1-1-5; Pt pr. and rt. 1; Ti pr.1-2, rt.1, v.2-2-2ap; Mt pr.1-1, v.2-2ap. Leg II: Fm d.0-1-2-5; Pt pr. and rt. 1; Ti pr.1-1-1, rt.1, v.1-1-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg III: Fm d.0-1-3-5; Pt pr. and rt. 1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.2-2ap. Leg IV: Fm d.1-2-5; Pt pr. and rt. 1; Ti d.1-0-0, pr. and rt.1-1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark brown, covered with long dark hairs (very dense on carapace sides) (Fig. 1). Clypeus dark brown, covered with dark hairs. Abdomen grey-brown, dorsally with no colour marking, covered with dark hairs (Fig. 1). Book-lung covers brown-grey. Spinnerets brown. All legs dark brown; their femora densely covered with long dark hairs. Palps dark brown. Palpal femur with a bulge, dorsally covered with long and dense dark hairs (Fig. 6). Palpal tibiae covered dorsally with white hairs. Palpal structure as in Figs. 4–5, 8–11.

FEMALE (from Karatau Mt. Range). Measurements. Carapace 3.5 long, 2.5 wide, 1.6 high at PLE. Ocular area 1.2 long, 1.7 wide anteriorly, 1.6 wide posteriorly. Diameter of AME 0.5. Abdomen 4.0 long, 3.1 wide. Cheliceral length 1.1. Clypeal height 0.4. Length of leg segments: leg I — 1.7 + 1.1 + 1.1 + 0.6 + 0.6; leg II — 1.7 + 1.0 + 0.9 + 0.6 + 0.6; leg III — 2.1 + 1.2 + 1.3 + 1.4 + 0.8; leg IV — 2.0 + 1.0 + 1.5 + 1.6 + 0.9. Leg spination. Leg I: Fm d.1-1-4; Ti pr.1-2, v.1-1-2ap; Mt pr.1-1, v.2-2ap. Leg II: Fm d.1-2-4; Ti pr.1-1, v.1-1-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg III: Fm d.1-2-5; Pt pr. and rt. 1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.2-2ap. Leg IV: Fm d.1-1-3; Pt pr. and rt. 1; Ti d.1-0-0, pr. and rt.1-1-1, v.2-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace brown, with dark brown eye field, covered with light and dark appressed scales (Figs. 2–3). Clypeus and “cheeks” brown, covered with long white hairs. Chelicerae brownish. Abdomen grey, dorsally with a mottled colour-pattern. Book-lung covers yellow-grey. Spinnerets brownish-grey. All legs brownish, with dark brown patches and semi-annulated. Palps brownish yellow. Structure of epigyne and spermathecae as in Figs. 12–14.

Aelurillus brutus Wesołowska, 1996

Figs. 15–28, Table 1.

Aelurillus brutus Wesołowska, 1996: 23–24, Fig. 4 (D♀; the ♀ holotype from the ZISP; examined).

A. ater (nec Kroneberg; partly misidentified): Mikhailov & Fet, 1994: 516.

A. sp. pr. v-insignitus (misidentified): Pavlenko, 1985: 150.

MATERIAL. TURKMENISTAN: 1 ♀ (ZISP; the holotype), Turkmenistan, South Ustyurt, Kaplankyrsky Reserve, 2.04.1985 (L.M.); 1 ♂ (ISEA), same reserve, Butentau, 27.09.1985 (L.M.); 1 ♀ (ISEA), Kaplankyr, on the ground, 2.04.1984 (L.M.), 3 ♂♂ (ZISP), Repetek, SE Karakumy, *Haloxylon aphyllum* sandy desert, 14.03.1982 (V. A. Krivokhatskiy); 1 ♀ (ISEA), same locality and habitat, 22.04.1993 (D.L.). — **KAZAKHASTAN:** 1 ♀ (ISEA), Mangyshlak Area, Ustyurt Reserve, Ustyurt Plateau, near El'chibek

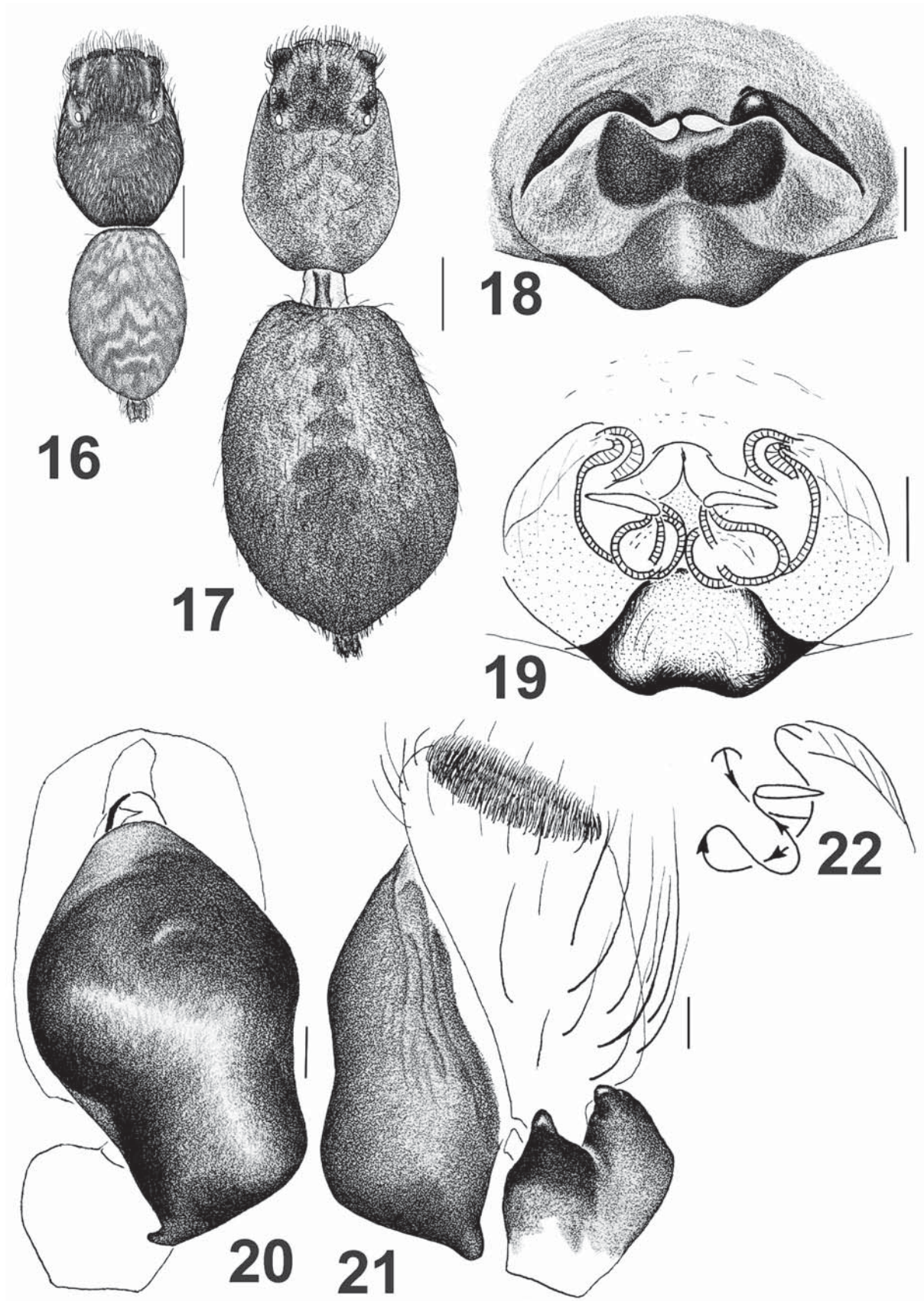
well, 19.05.1989 (A.Z.); 1 ♀ (ISEA), Mangyshlak Area, Eraliev Distr., ca 15 км SW Saksorkuyu well (43 km S of Akkuduk), 14.05.1989 (A.Z.); 3 ♀♀ (ISEA), Mangyshlak Area, Ustyurt Reserve, Ustyurt Plateau, E of Kendirli, 20.05.1989 (A.Z.); 2 ♀♀ (ISEA), Mangyshlak Area, Ustyurt Plateau, Baskorgan, 25.05.1989 (A. Raikhanov & S. I. Ibraev); 3 ♂♂, 1 ♀ (ZISP), Aral Sea, Barsakel'mes Island, 29.04–9.05.1984 (D.P.); 2 ♀♀ (ZISP), same locality, 6.05.1982 (T.P.), 1 ♂ (ZISP), same locality, 29.04.1984 (D. P.); 1 ♂ (ZISP), same locality, 3.09.1982 (D.P.).

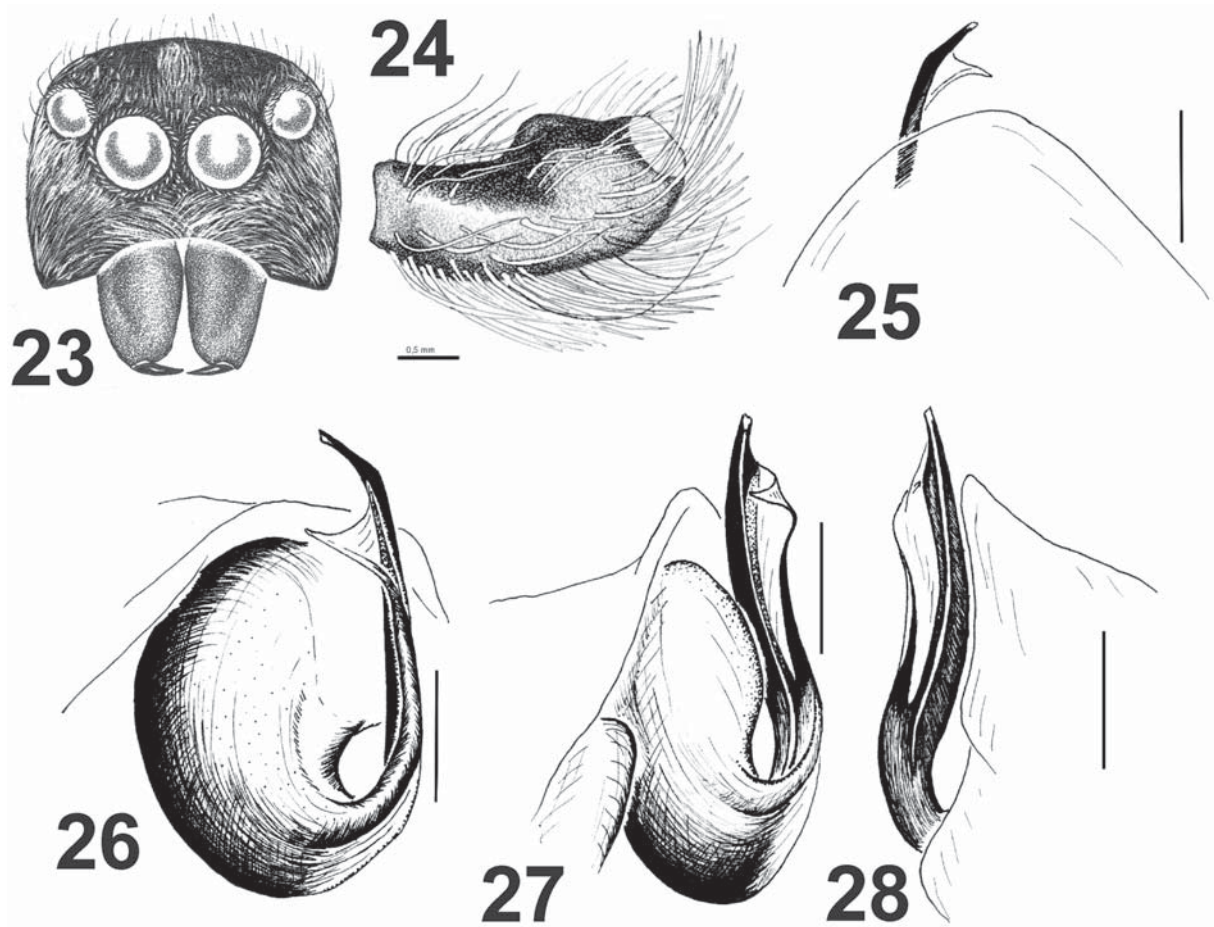
DIAGNOSIS. This species is similar to *A. ater*, *A. dubatolovi* sp.n. and *A. lutosus*, but differs from all of them by lacking long hairs on the carapace sides and legs, and by the presence of three longitudinal white stripes in the eye field, as well as the distinct colour-markings dorsally (Figs. 1, 16, 23 and 29–30, 32, 51). It can be separated from *A. ater* and *A. dubatolovi* sp.n. by the white hairs on ♂ palpal femora (Figs. 6, 24, 34, Table 1), and from *A. lutosus* by the bright white, sparsely-distributed hairs on ♂ palpal femora (Figs. 24, 62) and by the size and coloration of males (Figs. 16, 51).

DISTRIBUTION. W. Turkmenistan and W. Kazakhstan (Fig. 15).

DESCRIPTION. MALE (from Repetek). Measurements. Carapace 2.5 long, 1.8 wide, 1.4 high at PLE. Ocular area 1.05 long, 1.4 wide anteriorly, 1.3 wide posteriorly. Diameter of AME 0.4. Abdomen 2.4 long, 1.8 wide. Cheliceral length 0.7. Clypeal height 0.2. Length of leg segments: leg I — 1.2 + 0.7 + 0.8 + 0.6 + 0.55; leg II — 1.2 + 0.7 + 0.7 + 0.6 + 0.55; leg III — 1.7 + 0.85 + 0.9 + 1.1 + 0.6; leg IV — 1.6 + 0.8 + 1.0 + 1.2 + 0.7. Leg spination. Leg I: Fm d.0-1-1-5; Pt pr. and rt. 1; Ti pr.1-1-1, rt.1, v.1-2-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg II: Fm d.0-1-2-5; Pt pr. and rt. 1; Ti d.1-0-0, pr.1-1-1, rt. 1-1-1-0, v.1-1-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg III: Fm d.0-1-3-5; Pt pr. and rt. 1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.1-1-2ap. Leg IV: Fm d.1-1-5; Pt pr. and rt. 1; Ti d.1-0-0, pr.1-1-1, rt. 1-1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark brown, covered with white appressed scales. Eye field with three stripes of white hairs (Fig. 16). Clypeus and “cheeks” dark brown, covered with white hairs (Fig. 23, Table 1). Chelicerae brown-yellow. Abdomen grey-yellow, dorsally with a colour pattern as in Fig. 16. Book-lung covers grey-yellow. Spinnerets brown-yellow. All legs brown-yellow, with dark brown patches. Palps brownish, covered with white hairs. Palpal femur with a ventral-proximal bulge, and covered distally with long white hairs (Fig. 24). Palpal structure as in Figs. 20–21, 25–28.

FEMALE (holotype). Measurements. Carapace 3.2 long, 2.2 wide, 1.4 high at PLE. Ocular area 1.2 long, 1.6 wide anteriorly, 1.5 wide posteriorly. Diameter of AME 0.45. Abdomen 4.8 long, 3.3 wide. Cheliceral length 0.9. Clypeal height 0.35. Length of leg segments: leg I — 1.5 + 1.0 + 0.9 + 0.7 + 0.55; leg II — 1.5 + 0.8 + 0.9 + 0.7 + 0.5; leg III — 2.1 + 1.1 + 1.2 + 1.3 + 0.8; leg IV — 2.0 + 1.0 + 1.3 + 1.65 + 0.75. Leg spination. Leg I: Fm d.1-1-4; Ti pr.1-2, v.1-1-2ap; Mt pr.1-1, v.2-2ap. Leg II: Fm d.1-2-4; Ti pr.1-1, v.1-1-2ap; Mt pr.1-1, rt.1-0, v.2-2ap. Leg III: Fm d.1-2-4; Pt pr. and rt. 1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.2-2ap. Leg IV: Fm d.1-1-2; Pt pr. and rt. 1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.2-2ap. Coloration. Carapace dark brown, covered with white and sparse dark appressed scales; no colour pattern (Fig. 17). Clypeus and “cheeks” dark brown, covered with white hairs and bristles; white hairs surround AMEs and ALEs. Chelicerae brown-yellow. Abdomen yellow-grey; dorsally mottled, but with no distinct pattern. Book-lung covers grey. Spinnerets brown. All legs yellow, with dark-brown patches and semi-annulated, covered with white hairs. Palps yellow. Structure of epigyne and spermathecae as in Figs. 18–19, 22.





Figs 23–28. *Aelurillus brutus*: 23 — face; 24 — ♂ palpal femur; 25 — embolar division, ventral view; 26 — ditto, dorsal view; 27 — ditto, retrolateral view; 28 — ditto, prolateral view. Scale: 25–28 — 0.1 mm, 24 — 0.5 mm.

Рис. 23–28. *Aelurillus brutus*: 23 — фэйс; 24 — бедро пальпса самца; 25 — эмболярный отдел, вентрально; 26 — то же, дорзально; 27 — то же, ретролатерально; 28 — то же, пролатерально. Масштаб: 25–28 — 0,1 мм, 24 — 0,5 мм.

Aelurillus dubatolovi sp.n.

Figs. 29–50, Table 1.

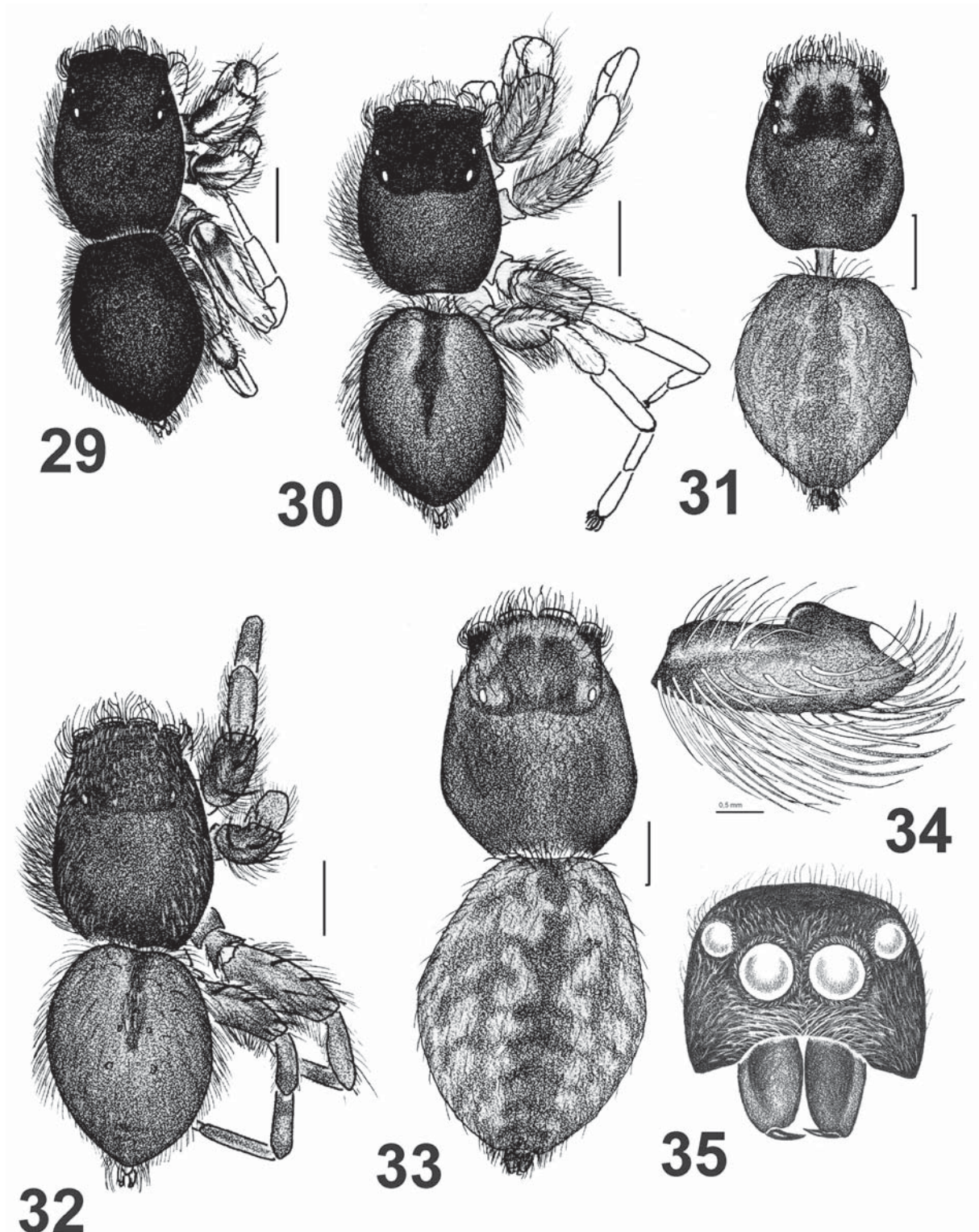
MATERIAL. Holotype ♂ (ISEA), Turkmenistan, W Kugitang, 1800–2500 m a.s.l., 9–16.05.1991 (V. V. Dubatolov).

Paratypes: TAJIKISTAN: 5 ♂♂, 1 ♀ (ZMMU), Mogoltau Mt. Range, piedmont plain, 27.02.1983 (A.N.), 6 ♂♂, 1 ♀ (SMNH), Karateginskiy Mt. Range, Sorbo-Komarou Rivers, near Shinglig, 19.04.1978 (A. P. Kononenko), 1 ♂, 1 ♀ (ISEA), Khazratisho Mt. Range, Sangdora, 1800 m a.s.l., 16.10.1987 (S.O.). — KAZAKHSTAN: 1 ♂ (MMUM), South-Kazakhstan [=Shymkent, Chimkent] Area, Karatau Mt. Range, source of Kokbulak River, lawn and slope of mountain, 22.04.1988 (C.T.); 1 ♂ (ISEA), South-Kazakhstan [=Shymkent, Chimkent] Area, Karatau Mt. Range, Kostobe canyon, 15 km of Suzak, 25.04.1988 (C.T.); 2 ♂♂ (MMUM), South-Kazakhstan [=Zhambyl, Dzhambul] Area, Sarysukkiy Distr., 81 km NE of Ulanbel', [2 km N of Saryturanga (Koktal)], Beptak-Dala desert, 5.10.1991 (A.F., A.Z.); 1 ♀ (MMUM),

South-Kazakhstan [=Zhambyl, Dzhambul] Area, Moiyunkum Distr., 9 km N of Aksuek, *Artemisia* clayey-stony desert (collected from a female of Pompilidae), 26.09.1991 (A.Z.); 1 ♀ (ISEA), South-Kazakhstan [=Zhambyl, Dzhambul] Area, Talasskiy Distr., 70th km of highway Akkol'-Ulanbel', Moiyunkum Dasert, 15.05.1991 (S. I. Ibraev, A.Z.); 1 ♀ (ISEA), South-Kazakhstan [=Zhambyl, Dzhambul] Area, Sarysukkiy Distr., 79 km NE of Ulanbel' (near Koktal), Beptak-Dala Desert, 18–19.05.1991 (S. I. Ibraev, A.Z.); 1 ♀ (ISEA), South-Kazakhstan [=Zhambyl, Dzhambul] Area, Moiyunkum Distr., 58 km NW of Akbakai, Deptak-Dala Desert, 7.06.1990 (A.F., A.Z.); 1 ♀ (MMUM), South-Kazakhstan [=Zhambyl, Dzhambul] Area, Talasskiy Distr., 21st km of highway Akkol'-Ulanbel', 15.05.1991 (S. I. Ibraev, A.Z.); 1 ♂ (ISEA), South-Kazakhstan [=Zhambyl, Dzhambul] Area, Moiyunkum Distr., Balkhash Lake, lettle islands, near Basaral Island, 26.04.1987 (C.T., A. M. Litovchenko); 7 ♂♂, 3 ♀♀ (ISEA), South-Kazakhstan [=Zhambyl, Dzhambul] Area, Moiyunkum Distr., 49 km S of Ulanbel', Moiyunkum Desert, 6.10.1991 (A.F., A.Z.); 2 ♂♂ (ISEA), South-Kazakhstan [=Dzhambul, Zhambyl] Area, Georgievka,

Figs 16–22. *Aelurillus brutus*: 16 — ♂ habitus (Repetek); 17 — ♀ habitus (holotype); 18 — epigyne (holotype); 19 — spermathecae (holotype); 20 — ♂ palpus, ventral view (Barsakel'mes Isl.); 21 — ditto, prolateral view; 22 — schematic course of insemination ducts. Scale: 16–17 — 10 mm, 18–21 — 0.1 mm.

Рис. 16–22. *Aelurillus brutus*: 16 — габитус самца (Репетек); 17 — габитус самки (голотип); 18 — эпигина, вид сверху (голотип); 19 — сперматека (голотип); 20 — пальпус самца, вентрально (о-в Барсакельмес); 21 — то же, пролатерально; 22 — схема копуляторных каналов. Масштаб: 16–17 — 10 мм, 18–21 — 0,1 мм.



Figs 29–35. *Aelurillus dubatolovi* sp.n.: 29, 30, 32 — ♂ habituses (29 — Kughitang Mt. Range, 30 — Surkhandarya Area, 32 — Mogoltau Mt. Range); 31, 33 — ♀ habituses (31 — Surkhandarya Area, 32 — Kughitang Mt. Range); 34 — ♂ palpal femur; 35 — face. Scale: 29–33 — 10 mm, 34 — 0.5 mm.

Рис. 29–35. *Aelurillus dubatolovi* sp.n.: 29, 30, 32 — габитусы самцов (29 — хр. Кугитанг, 30 — Сурхандарьинская область, 32 — хр. Моголтау); 31, 33 — габитусы самок (31 — Сурхандарьинская область, 32 — хр. Кугитанг); 34 — бедро пальпуса самца; 35 — фэйс. Масштаб: 29–33 — 10 мм, 34 — 0,5 мм.

24.04.1984 (S.O.); 1 ♀ (ISEA), South-Kazakhstan [=Zhambyl, Dzhambul] Area, near Furmanovka, 14.06.1988 (C.T.); 1 ♀ (ISEA), South-Kazakhstan [=Zhambyl, Dzhambyl] Area, Sarysuskii Distr., 76 km NE of Ulanbel', Vepal-Dala Desert, глиняная равнина близ сора, 5.06.1990 (A.F., A.Z.); 1 ♀ (ISEA), South-Kazakhstan [=Almaty] Area, Balkhash Distr., ca 40 km E of Bakanas, Saryesik-Atyrau Desert, 17.09.1989 (S. I. Ibraev, A.Z.); 2 ♂♂ (ISEA), South-Kazakhstan [=Almaty] Area, Balkhash Distr., 43 km E of Bakanas, 18.09.1989 (A.Z., S. I. Ibraev); 1 ♀ (ISEA), South-Kazakhstan [=Almaty] Area, Talgar Distr., bank of Ili River, near Kapchagai, 26.05.1990 (A.F., A.Z.); 2 ♀♀ (ISEA), South-Kazakhstan [=Almaty] Area, Syugatinskaya valley, ca 5 km of Charynskii canyon, desert, 2.10.1989 (A.F., A.Z.); 1 ♀ (ISEA), South-Kazakhstan [=Almaty] Area, Bagun Distr., 4 km SE of Arys', cliffs, 23.06.1993 (A. V. Gromov); 8 ♂♂ 3 ♀♀ (ISEA), South-Kazakhstan [=Almaty] Area, Chilik Distr., 1.5 km W of Charyn canyon, Taraigyr Mt., 21.04.1990 (C.T., A.F., A.Z.); 1 ♂ (ISEA), South-Kazakhstan [=Almaty] Area, Ili River, Dubunskaya, salt-marsh, 4.10.1989 (Collector unknown); 10 ♂♂ (ISEA), South-Kazakhstan [=Almaty] Area, Chilik Distr., Syugatinskaya valley, ca 5 km of Charynskii canyon, desert, 2.10.1989 (A.Z.); 1 ♀ (ISEA), South-Kazakhstan [=Taldy-Korgan, Taldy-Korgan] Area, Karatal'sky Distr., Ushkol' Lake, 21.09.1989 (S. I. Ibraev, A.Z.); 1 ♀ (ISEA), Dzhungarskiy Mt. Range, near Sarkand, 28.07.1989 (S.O.); 3 ♂♂ (ISEA), Перевал Кююк, 23 км юж. от Замбыл, under stones and in grass, 11.04.1988 (C.T.). — UZBEKISTAN: 1 ♀ (ZMMU), Kuraminskiy Mt. Range, Besh-Kul, 12.04.1985 (S.O.); 1 ♀ (ZMMU), Namangan Area, Pop [=Pap] Distr., Kuraminskiy Mt. Range, Kamchik [=Kamchikskai] Pass, ca 2300 m, (41°07'N, 70°29'E), 11.04.1985, (S.O.); 3 ♂♂ (ZMMU), Toshkent [=Tashkent] Area, Olkhangaron [=Akhangan] Distr., Kuraminskiy Mt. Range, confluence of Ertashsai River and Angren [=Akhangan] River, 41°08'N, 70°22'E, 12.04.1985, (S.O.); 1 ♂ (ISEA), Surkhandar'ya Area, Baysun Distr., 11 km N of Seirob, Zakhana Pass, 23.10.1992 (A.Z.); 2 ♂♂, 1 ♀ (ISEA), Surkhandar'ya Area, Baglydara canyon (Bai-Sun), 19–22.10.1992 (A.F., A.Z., C.T.). — TURKMENISTAN: 2 ♂♂, 1 ♀ (ZMMU), C Kopetdagh, ca 20 km S of Geok-Tepe, Dushak Mt., 2300 m a.s.l., 20.04.1989 (K. G. Mikhailov); 1 ♂ (ISEA), ca 8 km NE of Nebit-Dagh Mt., Bol'shoi Balkhan Mt. Range, 380–1000 m a.s.l., 1–2.04.1993, (D.L., A.Z.); 2 ♀♀ (ISEA), Morgunovka, 18.04.1977 (M. T. Shternbergs); 2 ♂♂ (ISEA), western Kugitang, 1800–2500 m a.s.l., 9–16.05.1991 (V.D.); 5 ♂♂ (ISEA), Kugitang, Bazar-Depe, 600–1600 m a.s.l., 5.04.1991 (V.D.); 2 ♂♂ (ISEA), W Kugitang, near Bazar-Depe, ca 600–1500 m a.s.l., 5.05.1991 (V.D.); 3 ♂♂ (ISEA), W Kugitang, almond-tree zone, ca 1200–1600 m a.s.l., 7.04.1991 (V.D.); 1 ♀ (ISEA), W Kugitang, 5–7 km SE of Bazar-Depe, mountain semi-desert, 13–19.05.1991 (V.D.); 1 ♀ (MMUM), Kugitang, Khodbysofil' canyon, ca 1000 m a.s.l., 10.05.1986 (S. L. Zonshtein). — KYRGHYZSTAN: 4 ♂♂, 1 ♀ (ISEA), Chu Valley, near Chon-Aryk, 1.03.1986 (S.O.); 1 ♀ (ISEA), foot-hills of Kirghizskiy Mt. Range (north slope), Bozbul'tas Mt., near Chon-Aryk, 1200 m a.s.l., 29.05.1983 (S.O.).

DIAGNOSIS. Both sexes of this species are similar to *A. ater*, *A. brutus* and *A. lutosus*. It can be separated from *A. ater* by the presence of white clypeal hairs and grey-white hairs on the palpal femora (cf Figs. 6–7 and 34–35, Table 1). From *A. brutus* and *A. lutosus*, the new species differs in body coloration and by the presence of dark hairs on the carapace sides (cf Figs. 16 and 29–30, 32, 51).

COMMENTS. The males and females of *A. dubatolovi* sp.n. from SW and NE parts of the species range differ in both general appearance (the specimens from SW part are bigger, darker and much more hairy, with indistinct colour-markings dorsally; the specimens from NE part are smaller, less hairy and with distinct colour-markings dorsally), and the structure of the copulatory organs (short and curved embolus in the males from SW, see Figs. 36–39; long and more curved in the males from NE, see Figs. 42–45). In this paper we pay no taxonomic significance to these differences and consider both forms to belong to the same species.

DISTRIBUTION. S. Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan (Fig. 50).

DESCRIPTION. MALE (paratype from type locality). Measurements. Carapace 3.1 long, 2.2 wide, 1.6 high at PLE. Ocular area 1.1 long, 1.6 wide anteriorly, 1.5 wide posteriorly. Diameter of AME 0.5. Abdomen 2.9 long, 1.9 wide. Cheliceral length 0.8. Clypeal height 0.2. Length of leg segments: leg I — 1.6 + 0.9 + 0.9 + 0.8 + 0.6; leg II — 1.6 + 0.9 + 0.9 + 0.8 + 0.7; leg III — 2.1 + 1.0 + 1.2 + 1.3 + 0.7; leg IV — 1.9 + 0.9 + 1.3 + 1.5 + 0.8. Leg spination. Leg I: Fm d.0-1-1-5; Pt pr. and rt.1; Ti pr.1-1-1, rt.1, v.1-2-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg II: Fm d.0-1-2-5; Pt pr. and rt.1; Ti pr.1-1-1, rt.1-1-0, v.1-1-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg III: Fm d.0-1-3-5; Pt pr. and rt.1; Ti d.1-0-0, pr.1-1-1, rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.1-1-2ap. Leg IV: Fm d.1-2-5; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.2-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark brown, with almost black eye field, covered with dark and white appressed scales (Figs. 29–30, 32). Carapace sides covered with long, dark hairs. Clypeus and “cheeks” brown, covered with white hairs (Fig. 35, Table 1). White hairs surround the anterior eyes. Chelicerae yellow-brown. Abdomen yellowish grey, dorsally dark brown, with no pattern. Book-lung covers and spinnerets grey-yellow. All legs yellow-brown; femora dorsally with two light yellow stripes, but ventrally dark brown. Femora of all legs covered dorsally with long dark hairs. Palpal femur with a ventral outgrowth, and covered dorsally with greyish or brownish white hairs (Fig. 34). Palpal structure as in Figs. 36–45.

FEMALE (paratype from Kugitang). Measurements. Carapace 3.6 long, 2.5 wide, 1.5 high at PLE. Ocular area 1.2 long, 1.7 wide anteriorly, 1.6 wide posteriorly. Diameter of AME 0.55. Abdomen 4.1 long, 3.2 wide. Cheliceral length 1.1. Clypeal height 0.4. Length of leg segments: leg I — 1.7 + 1.0 + 1.0 + 0.8 + 0.6; leg II — 1.7 + 1.0 + 1.0 + 0.7 + 0.5; leg III — 2.3 + 1.1 + 1.2 + 1.4 + 0.7; leg IV — 2.1 + 1.1 + 1.4 + 1.6 + 0.9. Leg spination. Leg I: Fm d.1-1-3; Ti pr.1-2, v.1-2-2ap; Mt pr.1-1, v.2-2ap. Leg II: Fm d.1-2-4; Ti pr.1-1, v.1-1-2ap; Mt pr.1-1, v.2-2ap. Leg III: Fm d.1-2-5; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.2-2ap. Leg IV: Fm d.1-1-2; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark brown, covered with black and white appressed scales (Figs. 31–32). Clypeus, “cheeks” and chelicerae brown, covered with white hairs. Abdomen grey, dorsally with reticulate colour markings. Book-lung covers yellow-grey. Spinnerets brownish. All legs brown-yellow, with dark brown patches and semi-annulated. Palps brownish. Structure of epigyne and spermathecae as in Figs. 46–49.

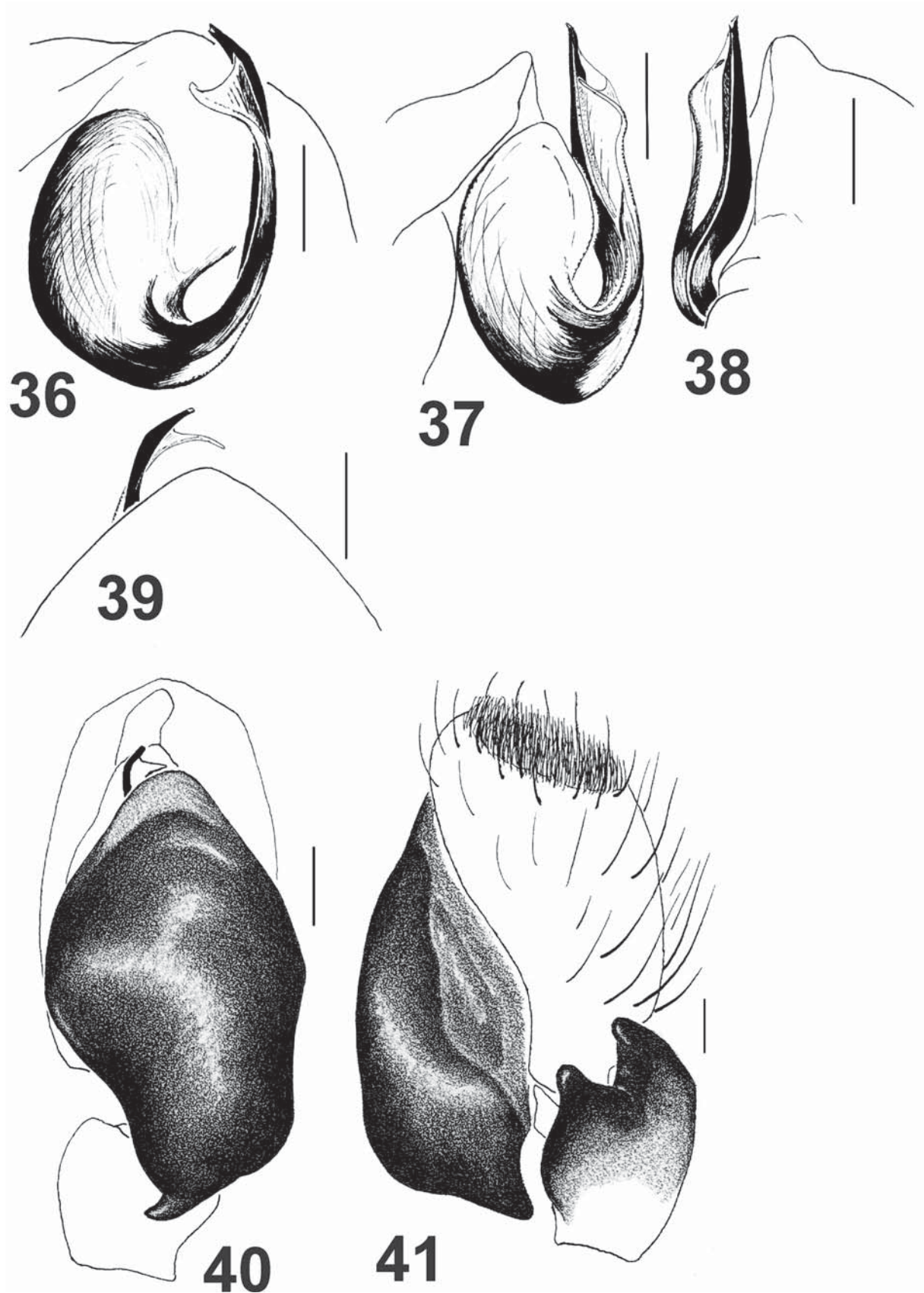
ETYMOLOGY. The species is named after Dr. Vladimir V. Dubatolov (Novosibirsk, Russia), the well-known Russian lepidopterist, who has collected a lot of interesting spider material from Central Asia, including specimens of this new species.

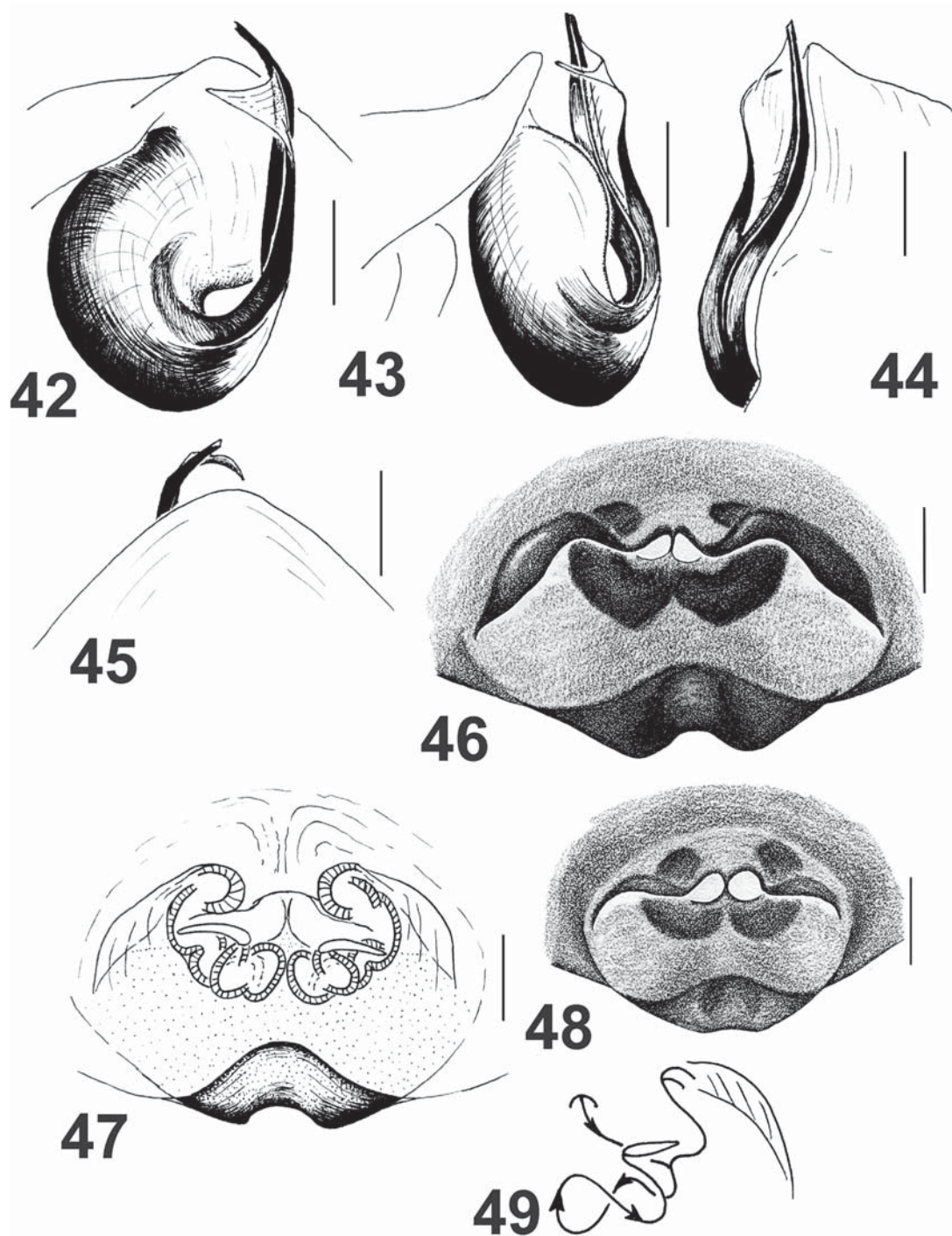
Aelurillus lutosus (Tyschchenko, 1965) Figs. 50–63.

Melioranus lutosus: Tyschchenko, 1965: 703, f. 10 (♀).

Aelurillus lutosus: Prószyński, 1979: 303, Fig. 1 (♀; transferred from *Melioranus*); Logunov & Marusik, 2000: 265, figs. 7–11 (♂♀).

MATERIAL. KAZAKHSTAN: 1 ♂ (ZISP), Kyzyl-Orda Area, Aral'sk Distr., Aral Sea, Barsakel'mes Isl. (ca 45°41'N, 59°55'E), 3.09.1982 (D.P.); 1 ♂ (ISEA), Kustanai [=Kostanai] Area, Naurzum Distr., shore of Bol'shoi Aksuat Lake, 16.07.1996 (A.Z.); 2



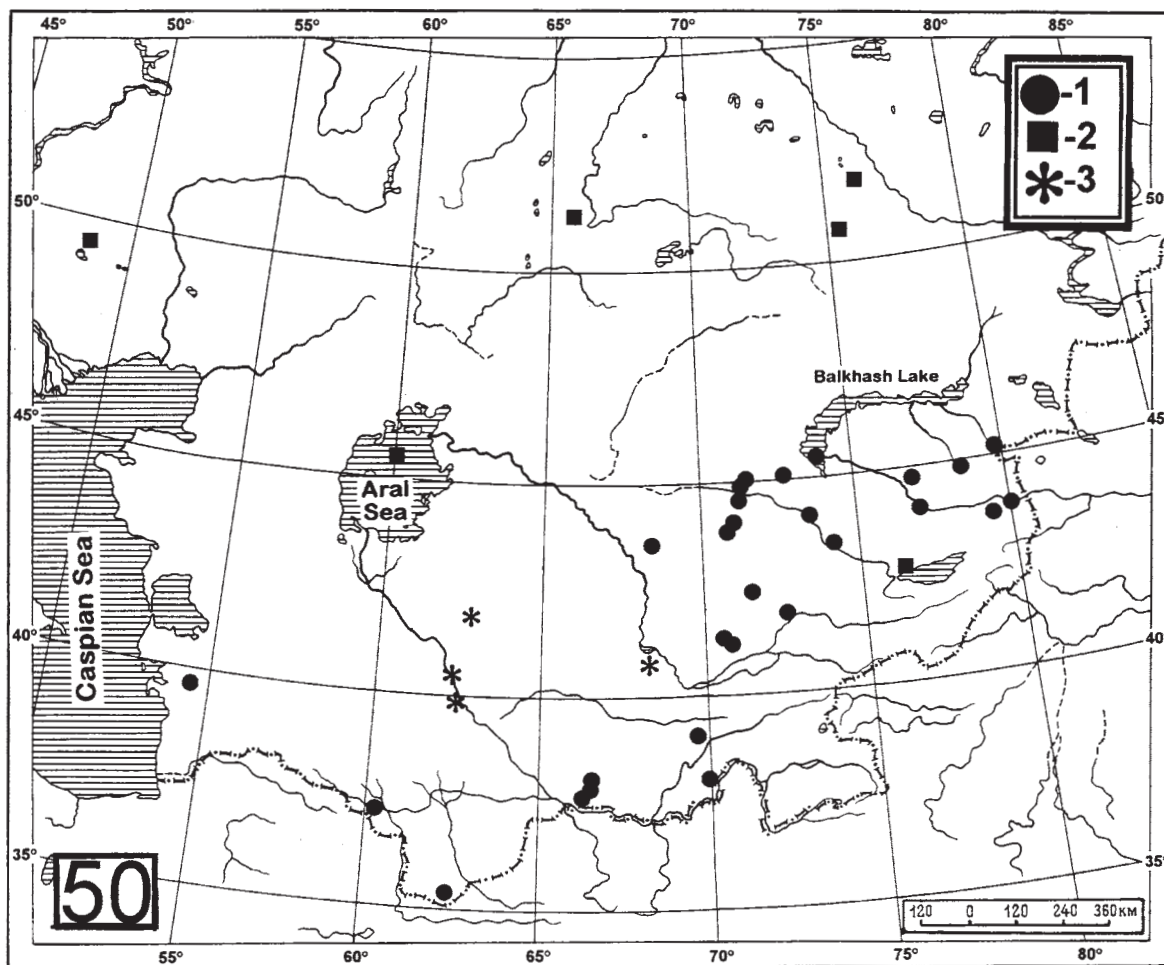


Figs 42–49. *Aelurillus dubatolovi* sp.n.: 42 — embolar division, dorsal view (South Kazakhstan Area); 43 — ditto, retrolateral view; 44 — ditto, prolateral view; 45 — ditto, ventral view; 46, 48 — epigynes (46 — Kughitang Mt. Range, 48 — Khazratisho Mt. Range); 47 — spermathecae; 48 — schematic course of insemination ducts. Scale: 0.1 mm.

Рис. 42–49. *Aelurillus dubatolovi* sp.n.: 42 — эмболярный отдел, дорзально (Южно-Казахстанская область); 43 — то же, ретролатерально; 44 — то же, пролатерально; 45 — то же, вентрально; 46, 48 — эпигины (46 — хр. Кугитанг, 48 — хр. Хазратишо); 47 — сперматека; 48 — схема копуляторных каналов. Масштаб: 0,1 мм.

Figs 36–41. *Aelurillus dubatolovi* sp.n.: 36 — embolar division, dorsal view (Kughitang Mt. Range); 37 — ditto, retrolateral view; 38 — ditto, prolateral view; 39 — ditto, ventral view; 40 — ♂ palpus, ventral view (Kughitang Mt. Range); 41 — ditto, prolateral view. Scale: 0.1 mm.

Рис. 36–41. *Aelurillus dubatolovi* sp.n.: 36 — эмболярный отдел, дорзально (хр. Кугитанг); 37 — то же, ретролатерально; 38 — то же, пролатерально; 39 — то же, вентрально; 40 — палец самца, вентрально (хр. Кугитанг); 41 — то же, пролатерально. Масштаб: 0,1 мм.



Figs 50. Distribution of *Aelurillus dubatolovi* sp.n. (1), *A. lutosus* (2) and *A. nenilini* sp.n. (3).

Рис. 50. Распространение *Aelurillus dubatolovi* sp.n. (1), *A. lutosus* (2) и *A. nenilini* sp.n. (3).

♂♂, 1 ♀ (ISEA), Pavlodar Area, Ermak Distr., ca 40 km W of Pavlodar, near Malyi Kalkaman Lake, xerophytic steppe (sandy slope), 2.05.1990 (O.L.); 1 ♀ (ISEA), same locality, 25.05.1993 (O.L.); 79 ♂♂, 16 ♀♀ (ISEA, MMUM), same locality, between Sol'vetka and Pogranichnik, 10.04.1991 (O.L.); 1 ♀ (ISEA), same area, Aksu [=Ermak] Distr., near Maly Kalkaman Lake, 52°04'N, 76°33'E, 6.06.1994 (O.L.); 8 ♂♂, 2 ♀♀ (ISEA), same area, Maiskiy Distr., ca 40 km W of Elubai, E shore of Kokuizym, 19.08.1990 (O.L.); 1 ♀ (ISEA), same area, Bayanaul Distr., Babaly Mts., scree, 7.08.1990 (O.L.); 1 ♀ (ISEA), MX, 6.06.1994 (O.L.); 1 ♀ (ISEA), same area, Malyi Kalkaman Lake, dry slope, 11.04.1990 (O.L.); 2 ♂♂ (ZMMU), Uralsk Area, near Dzhanybek, *Artemisia* steppe, 30.07.1972, 22–23.06.1975, 28.05–2.07.1982, 23.08.1982, 5–9.09.1982, 17–20.09.1982 (K. G. Mikhailov, Yu. I. Chernov, I. G. Kritskaya). — KYRGHYZSTAN: 1 ♂ (ISEA), Issyk-Kul' Lake, ca 1800 m a.s.l., 20.08.1962 (A. P. Kononenko); 1 ♂ (ISEA), ca 50 km E of Rybach'e, ca 20 km N of Toru-Aigyr, 3.09.1971 (A. P. Kononenko).

DIAGNOSIS. This species is similar to *A. ater*, *A. brutus* and *A. dubatolovi*, but is easily distinguished by the coloration of the male (dark males with white hairs in eye field and on carapace, see Fig. 51) and the structure of the embolic division

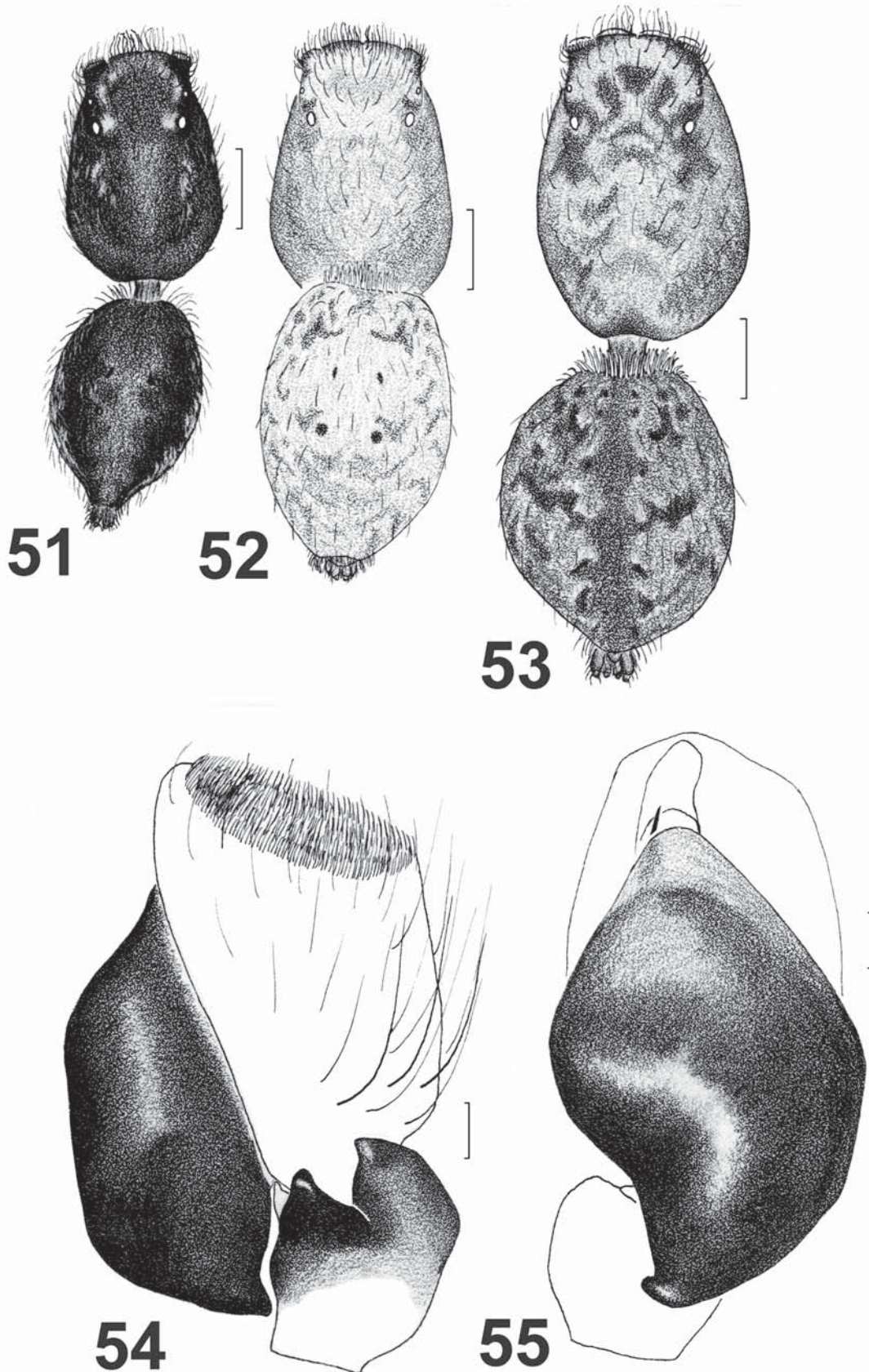
(the tip of the terminal apophysis thin, poorly marked, see Figs. 56–58).

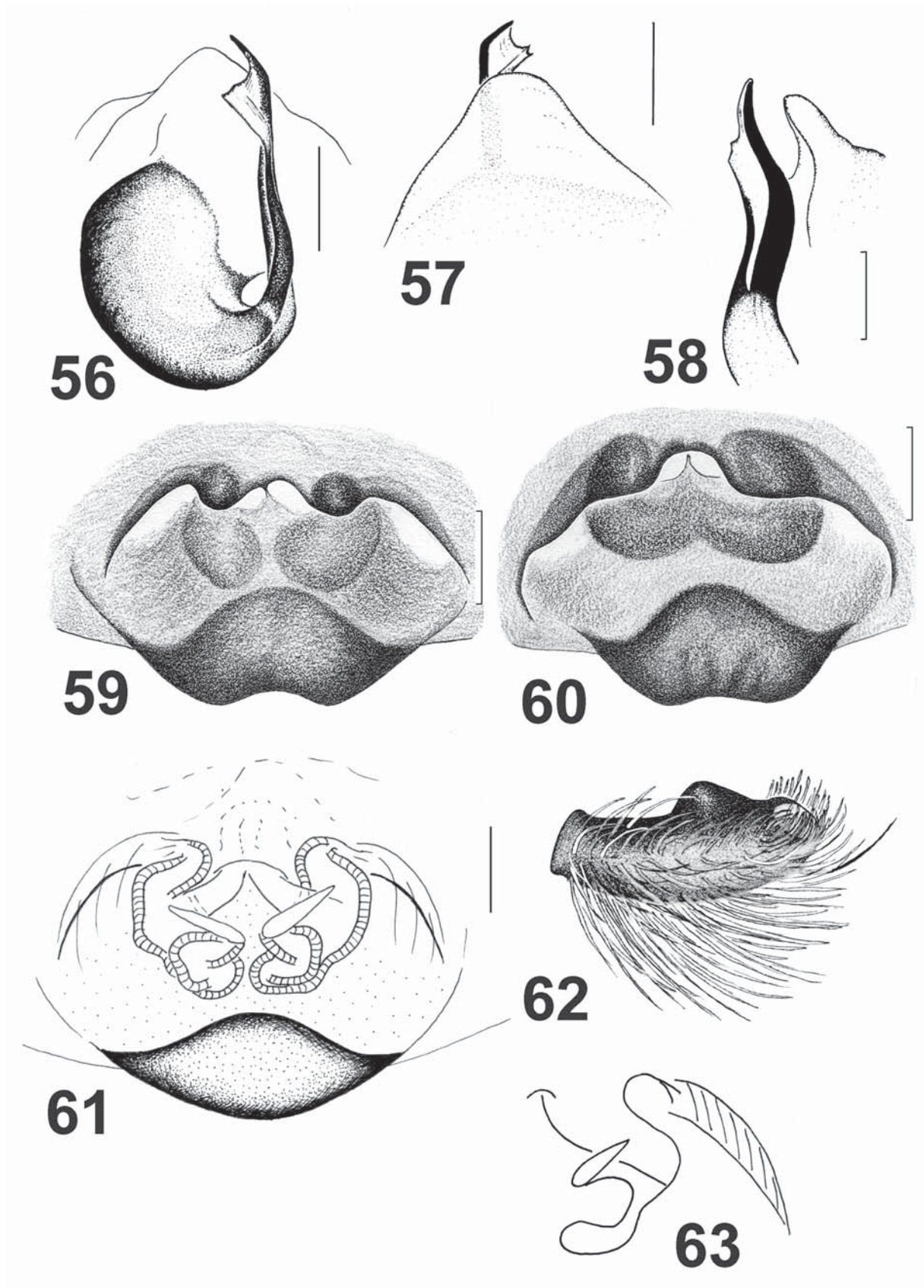
DISTRIBUTION. Kazakhstan, northern Kyrgyzstan (Fig. 50).

DESCRIPTION. MALE (from Kazakhstan, Pavlodar Area). Measurements. Carapace 3.4 long, 2.5 wide, 1.4 high at PLE. Ocular area 1.2 long, 1.6 wide anteriorly, 1.5 wide posteriorly. Diameter of AME 0.45. Abdomen 3.3 long, 2.5 wide. Cheliceral length 1.1. Clypeal height 0.3. Length of leg segments: leg I — 1.5 + 1.1 + 0.9 + 0.7 + 0.5; leg II — 1.6 + 1.0 + 0.9 + 0.7 + 0.7; leg III — 2.5 + 1.0 + 1.4 + 1.4 + 0.9; leg IV — 2.0 + 1.0 + 1.3 + 1.4 + 0.9. Leg spination. Leg I: Fm d.0-1-1-5; Pt pr. and rt.1; Ti d. 1-0-0, pr.1-1-2, v.1-1-2ap; Mt pr. and. rt.1-1, v.2-2ap. Leg II: Fm d.0-1-2-5; Pt pr. and rt.1; Ti pr.1-1-1, rt.1, v.1-1-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg III: Fm d.0-1-3-5; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.2-2ap. Leg IV: Fm d.1-2-5; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1-1, v.2-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark brown, covered with white and sparse black appressed

Figs 51–55. *Aelurillus lutosus* (Kazakhstan, Pavlodar Area): 51 — ♂ habitus; 52, 53 — ♀ habituses; 54 — ♂ palpus, prolatateral view; 55 — ditto, ventral view. Масштаб: 51–53 — 10 mm, 54–55 — 0.1 mm.

Рис. 51–55. *Aelurillus lutosus* (Павлодарская область, Казахстан): 51 — габитус самца; 52, 53 — габитусы самок; 54 — пальпс самца, вентрально; 55 — то же, пролатерально. Масштаб: 51–53 — 10 мм, 54–55 — 0,1 мм.





scales. Sides of carapace sparsely covered with dark hairs (Fig. 51). Clypeus and "cheeks" dark brown, covered with white and sparse yellowish hairs. Chelicerae brown. White hairs around anterior eyes. Abdomen grey; dorsally dark brown, with no colour pattern, but covered with white appressed hairs. Book-lung covers yellowish grey. Spinnerets brownish grey. All legs brownish yellow, with dark brown patches and sparsely covered with long and short dark and white hairs. Palps yellow, all segments but cymbium densely covered with yellowish white hairs (Fig. 62). Palpal femur with a proximal-ventral bulge. Palpal structure as in Figs. 56–58.

FEMALE (from Kazakhstan, Pavlodar Area). Carapace 3.8 long, 2.6 wide, 1.8 high at PLE. Ocular area 1.4 long, 1.8 wide anteriorly, 1.7 wide posteriorly. Diameter of AME 0.5. Abdomen 3.9 long, 3.1 wide. Cheliceral length 1.4. Clypeal height 0.3. Length of leg segments: leg I — 1.5 + 1.0 + 1.0 + 0.6 + 0.6; leg II — 1.5 + 1.1 + 1.1 + 0.7 + 0.65; leg III — 2.4 + 1.3 + 1.3 + 1.5 + 0.9; leg IV — 2.3 + 1.2 + 1.5 + 1.6 + 1.0. Leg spination. Leg I: Fm d.1-1-3; Ti pr.1-2, v.1-1-2ap; Mt pr.1-1, v.2-2ap. Leg II: Fm d.1-2-4; Ti pr.1-1, v.1-1-2ap; Mt pr.1-1, v.2-2ap. Leg III: Fm d.1-2-4; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.1-1-2ap. Leg IV: Fm d.1-1-2; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark brown, densely covered with silvery-white appressed scales; carapace also with patches of dark hairs on eye field and behind PMEs (Figs. 52–53). Clypeus and "cheeks" brown, covered with yellow-white hairs. Chelicerae brown. White hairs around anterior eyes. Abdomen grey; dorsally with reticulate colour-markings. Book-lung covers and spinnerets yellow-grey. All legs yellow, with dark brown patches and semi-annulated, densely covered with white/yellow appressed hairs. Palps yellow. Structure of epigyne and spermathecae as in Figs. 59–61, 63.

Aelurillus muganicus Dunin, 1984

Figs. 64–76.

Aelurillus muganicus Dunin, 1984: 50, fig. 12, 13a–b (D♀♂; the ♀ holotype from the ZMMU; examined).

Aelurillus muganicus: Nenilin, 1985 (in part): 130; Dunin & Mamedov, 1992: 57; Logunov & Guseinov, 2002: 245.

Aelurillus azerbaijanicus Dunin, 1984: 51, fig. 11 (D♀; the ♀ holotype from the ZMMU; examined). **Syn.n.**

Aelurillus azerbaijanicus: Nenilin, 1985: 130; Guseinov, 1998: 10.

MATERIAL. AZERBAIJAN: Holotype ♀ (ZMMU; the holotype of *Aelurillus muganicus*), Sabirabad Distr., Pokrovka, 10.09.1973 (P.D.); 1 ♀ (ZMMU; the paratype of *Aelurillus muganicus*), Absheron Peninsula, Glinyanyi Isl., напротив Alet, 15.07.1979 (P.D.); 4 ♂♂ (ZMMU), Absheron Peninsula, near Baku, Bina, 3.10.1973 (P. M. Dunin); 2 ♀♀ (ZMMU; the holotype and paratype of *Aelurillus azerbaijanicus*), Absheron Peninsula, near Baku, Zyk, 8.06.1979 (P.D.); 1 ♀ (ZMMU; the paratype of *Aelurillus azerbaijanicus*), Absheron Peninsula, 21.05.1977 (P.D.); 2 ♂♂ (ZMMU), N near Vartashen, forest, 17.07.1984 (P.D.); 4 ♀♀ (ZMMU), Ismailly Distr., Khanai, 700 m a.s.l., 1253, 9.07.2001 (E.G.); 1 ♀ (ZMMU), Baku, Yasamal'skaya Dolina, 3.05.1981 (P.D.); 1 ♂ (MMUM), 1 ♂ (ISEA), 1 ♀ (ISEA), Absheron Peninsula, 20.05.1976 (P.D.), 1 ♂ (ISEA), near Baku,

Bina, 3.08.1977 (P.D.); 1 ♂ (MMUM), Baku, 28.05.1976 (P.D.); 2 ♀♀ (ZMMU), Baku, 15.06.1988 (P.D.); 1 ♂ (ISEA), Baku, beach Shikhova, 23.06.1975 (P.D.); 16 ♂♂, 10 ♀♀ (ZMMU), Absheron Peninsula, Baku, Bailov, 26.05.2001 (E.G.); 1 ♂ (MMUM), Gobustan, 15.04.2001 (E.G.); 1 ♂, 4 ♀♀ (MMUM), Absheron Peninsula, Gyurgyan, 28.05.2001 (E.G.); 11 ♂♂, 14 ♀♀ (ZMMU), Absheron Peninsula, Gyurgyan, 1.06.2001 (E.G.); 2 ♀♀ (ZMMU), Lerik, Gosmalyan, 1400 m a.s.l., 18.05.1985 (P.D.); 1 ♂ (ZMMU), Absheron Peninsula, vicinities of Gyurgyan, 40°24'N, 50°16'E, semi-desert, 17.04.2001 (Yu. M. Marusik); 1 ♂ (ISEA), Absheron Peninsula, Umbali Mts., 40°01'N, 49°38'E, mountain semi-desert, 19.04.2001 (Yu. M. Marusik); 1 ♀ (ISEA), Absheron Peninsula, near Baku, Gobustan, 40°05'N, 49°25'E, mountain semi-desert, 15.04.2001 (Yu. M. Marusik); 1 ♂ (ZMMU), Absheron Peninsula, Bakinskies Ushi Mt., 19.04.2001 (E.G.); 1 ♂, 1 ♀ (ISEA), 1 ♂ (MMUM), 1 ♀ (ZMMU), Absheron Peninsula, Dyubendy, 12–23.05.1998 (E.G.); 2 ♀♀ (MMUM), Absheron Peninsula, Baku, 516A, 3.07.1997 (E.G.); 1 ♀ (MMUM), Lerik Distr., Digyakh, 1600 m a.s.l., 15.05.1985 (P.D.); 3 ♂♂, 1 ♀ (ISEA), same distr., Talysh Mts., Zuvand, Galabyn, 1700–2000 m a.s.l., under stones on slopes, 10–11.10.1983 (S. I. Golovatch); 1 ♂ (ISEA), same distr., Gosmalyan, 1400 m a.s.l., 18.05.1985 (P.D.); 3 ♂♂ (ZMMU), same distr., Amburdara, 12.05.1985 (P.D.); 1 ♀ (ISEA), Lerik, Gosmalyan, 1400 m a.s.l., A-0378, 14.05.1985 (P.D.), 1 ♀ (ZMMU), same distr., Zuvand, Gilidara, 1800 m a.s.l., semi-desert, under stones, 8.10.1983 (S. I. Golovatch); 1 ♂ (ZMMU), same distr., Kyalvaz, 1600 m a.s.l., 13.05.1985 (P.D.), 3 ♂♂ (ISEA), same distr., Gosmalyan, 1400 m a.s.l., 14–18.05.1985 (P.D.); 2 ♀♀ (ZMMU), Masally, Metisu, 1.06.1984 (P.D.).

DIAGNOSIS. This species is similar to *A. blandus* Metzner, 1999 [see Metzner, 1999; Azarkina, 2002], but differs in coloration of the male (carapace lacking a big white central patch and instead with 3 longitudinal white stripes; see Fig. 64), the structure of the embolic division (the embolus much more massive and rounded; see Figs. 67–69, 71) and the structure of the epigyne and spermathecae (the smaller epigynal pocket and the insemination ducts have more numerous loops).

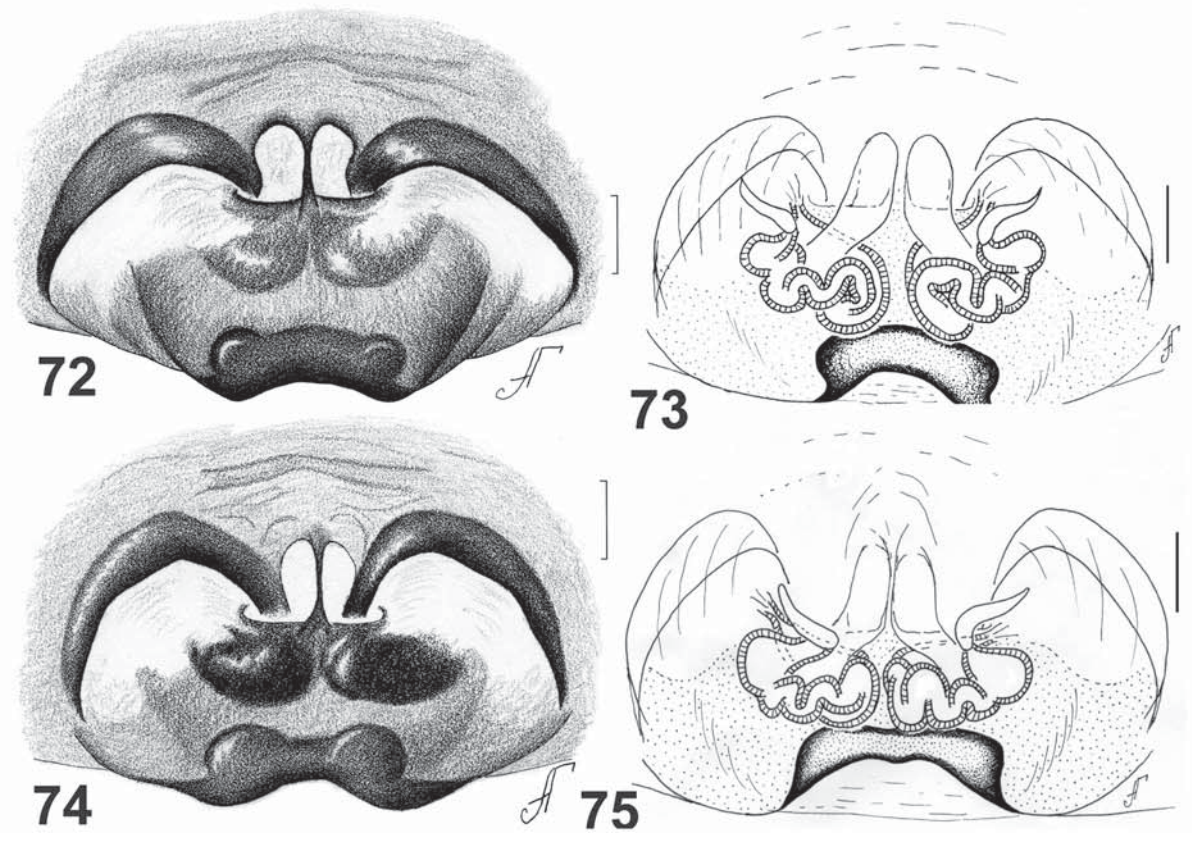
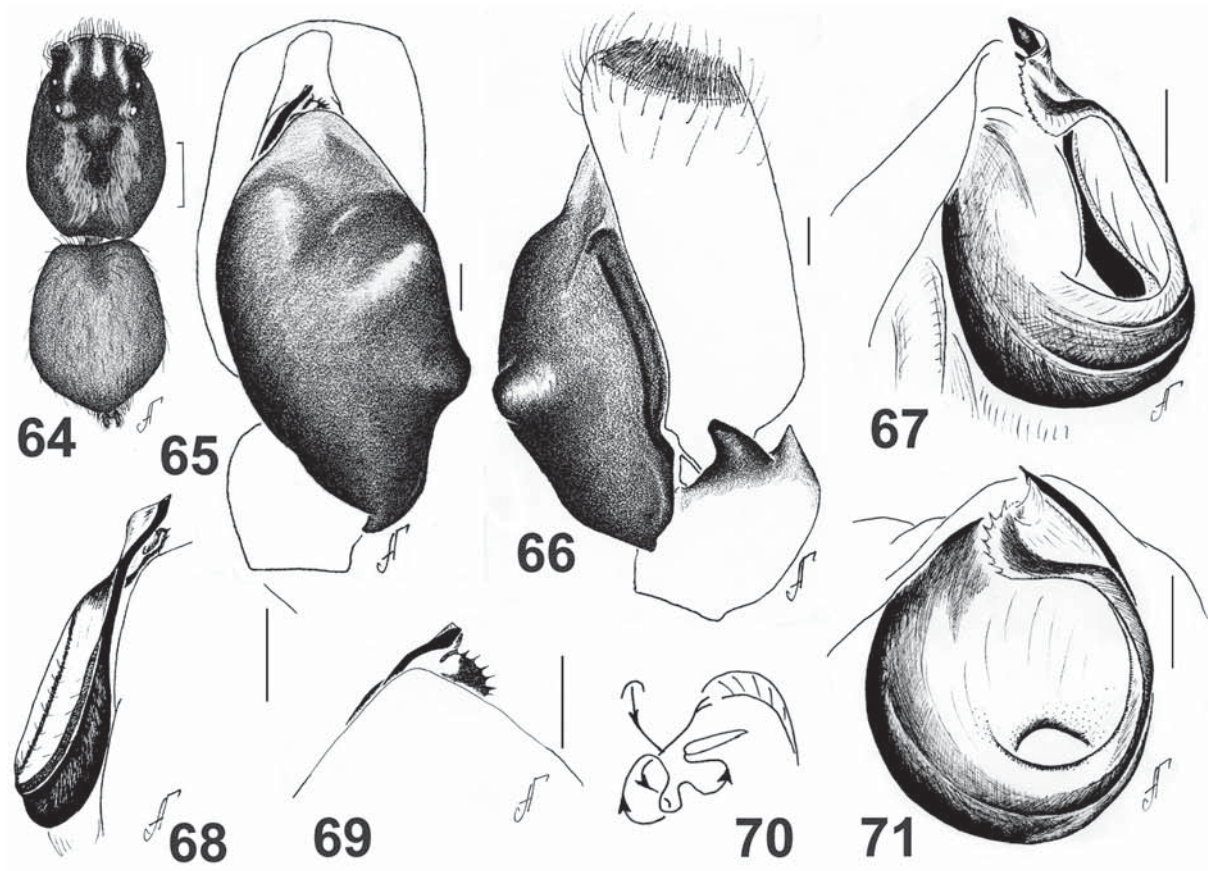
A re-examination of the type series and additional material identified by P. Dunin as *A. azerbaijanicus* has revealed that (1) the males of *A. muganicus* occur in the same localities as *A. azerbaijanicus* and (2) epigynal variation is quite high and overlapping in both *A. azerbaijanicus* (*sensu* Dunin) and *A. muganicus*; therefore, the name *A. azerbaijanicus* is considered a junior synonym of *A. muganicus*, the description of which predates that of the former species [see Dunin, 1984].

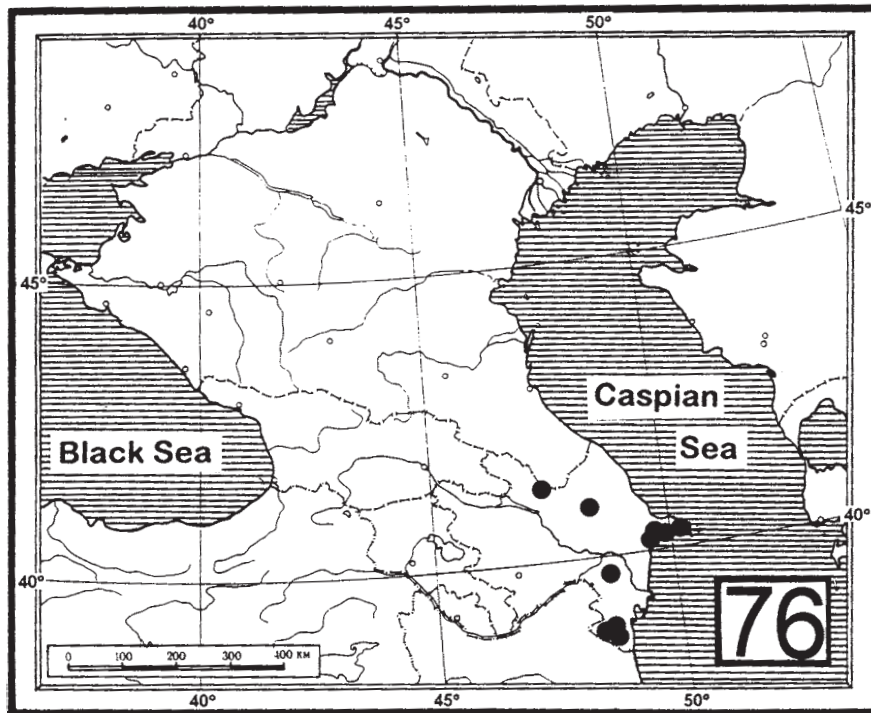
DISTRIBUTION. Azerbaijan (Fig. 76).

DESCRIPTION. MALE (paratype). Measurements. Carapace 3.0 long, 2.1 wide, 1.4 high at PLE. Ocular area 1.1 long, 1.4 wide anteriorly, 1.3 wide posteriorly. Diameter of AME 0.45. Abdomen 2.5 long, 2.1 wide. Cheliceral length 0.7. Clypeal height 0.25. Length of leg segments: leg I — 1.4 + 0.8 + 1.0 + 0.6 + 0.6; leg II — 1.4 + 0.9 + 0.9 + 0.7 + 0.65; leg III — 2.0 + 1.0 + 1.0 + 1.1 + 0.75; leg IV — 1.8 + 0.8 + 1.2 + 1.4 + 0.9. Leg spination. Leg I: Fm d.0-1-1-5; Pt pr. and rt.1; Ti d. 1-0-0, pr.1-1-1, rt.1, v.2-2-2ap; Mt pr.1-1, v.2-2ap. Leg II: Fm d.0-1-2-5; Pt pr. and rt.1; Ti d. 1-0-0, pr.1-1-1, rt.1-1-0, v.1-2-2ap; Mt pr. and rt.1-1, v.2-2ap. Leg III: Fm d.0-1-3-5; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.2-2ap. Leg IV: Fm d.1-2-5; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark

Figs 56–63. *Aelurillus lutosus* (Kazakhstan, Pavlodar Area): 57 — ditto, ventral view; 58 — ditto, prolatateral view; 59, 60 — epigynes; 61 — spermathecae; 62 — ♂ palpal femur; 63 — schematic course of insemination ducts. Scale: 56–61 — 0.1 mm, 62 — 0.5 mm.

Рис. 56–63. *Aelurillus lutosus* (Павлодарская область, Казахстан): 57 — то же, вентрально; 58 — то же, пролатерально; 59, 60 — эпигины; 61 — сперматека; 62 — бедро пальпыса самца; 63 — схема копуляторных каналов. Масштаб: 56–61 — 0,1 мм, 62 — 0,5 мм.





Figs 76. Distribution of *Aelurillus muganicus*.
Рис. 76. Распространение *Aelurillus muganicus*.

brown, covered with dark appressed scales, and with black eye field and a wide median white stripe (Fig. 64). Clypeus and “cheeks” dark brown, covered with white hairs. Chelicerae brown. White hairs around anterior eyes. Abdomen grey brownish, dorsally with indistinct colour-markings. Book-lung covers and spinnerets brown-grey. All legs yellow brownish, with dark brown patches and annulations. Femora I apically with a row of dark bristles. Palps yellow, but cymbium yellow-brown. Palpal femur lacking a proximal-ventral bulge, densely covered with yellowish white hairs. Palpal structure as in Figs. 65–69, 71.

FEMALE (paratype). Carapace 3.3 long, 2.6 wide, 1.5 high at PLE. Ocular area 1.3 long, 1.7 wide anteriorly, 1.6 wide posteriorly. Diameter of AME 0.5. Abdomen 4.1 long, 3.0 wide. Cheliceral length 1.0. Clypeal height 0.3. Length of leg segments: leg I — 1.5 + 1.0 + 1.0 + 0.6 + 0.6; leg II — 1.6 + 1.1 + 1.0 + 0.7 + 0.6; leg III — 2.1 + 1.2 + 1.2 + 1.4 + 0.7; leg IV — 2.1 + 1.1 + 1.4 + 1.7 + 0.8. Leg spination. Leg I: Fm d.1-1-4; Ti pr.1-1, v.1-1-2ap; Mt v.2-2ap. Leg II: Fm d.1-2-4; Ti pr.0-1, v.1-2-2ap; Mt pr.1-1, v.2-2ap. Leg III: Fm d.1-3-5; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.1-1-2ap. Leg IV: Fm d.1-1-2; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace dark brown, with no colour pattern and covered with white appressed scales. Clypeus and “cheeks” brown, covered with white hairs

and bristles. Chelicerae dark brown. Abdomen brownish grey, dorsally without colour-markings. Book-lung covers grey. Spinnerets brownish. All legs yellow, with brown patches and annulations. Palps yellow, covered with white hairs. Structure of epigyne and spermathecae as in Figs. 70, 72–75.

Aelurillus nenilini Azarkina, 2002
Figs. 50, 77–80.

Aelurillus nenilini Azarkina, 2002: ..., figs 71, 81–85 (D♂; the ♂ holotype from ISEA; examined).

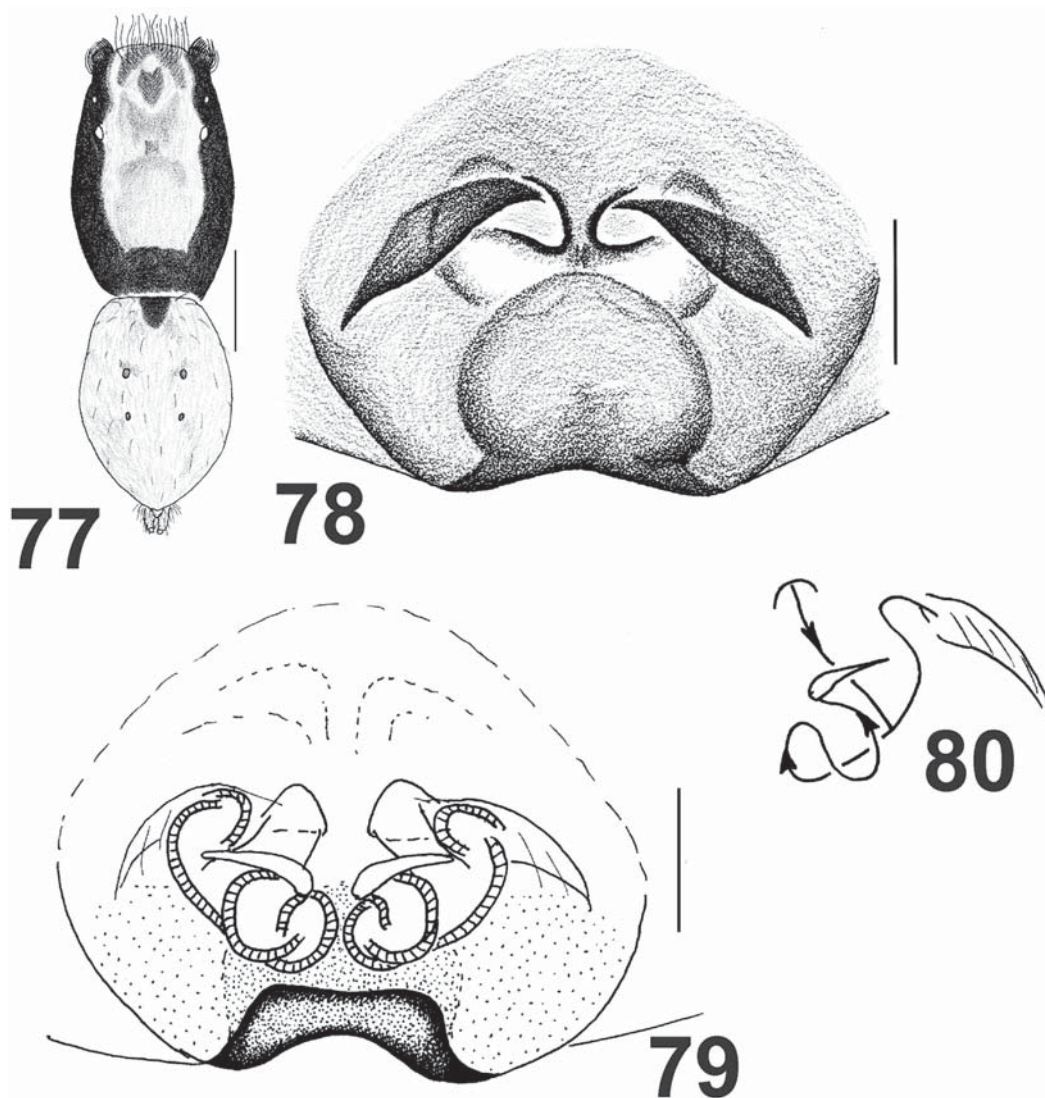
Aelurillus m-nigrum (nec Kulczyński; pro parte, misidentified); Nenilin, 1984: 10–11.

MATERIAL TURKMENISTAN: 2 ♂♂ (ISEA; the holotype and paratype of *Aelurillus nenilini*), Amudar'ya National Reservation, Kabakly, 28.03.1982 (Collector unknown); 1 ♂ (ZMMU), Amudar'ya, Nargyz Island, tugai, 13.04.1983 (S. K. Alekseev); 1 ♂ (ZISP), Chardzhou Region, Amudar'ya Reserve, Kabakly, 15–25.03.1987 (F. Zeleev). — **UZBEKISTAN:** 1 ♂ (ISEA; the paratype ♂ of *Aelurillus nenilini*), Bukantau Mts, Irlir, Karakuduk well, 9.05.1976 (A. P. Kononenko); 4 ♂♂, 1 ♀ (ISEA), near frontier with Turkmenistan, 10 km N of Dargan-Ata, valley of Amudar'ya River, tugai, 4.04.1085 (D.L.). — **KAZAKHSTAN:** 1 ♂ (ISEA), South-Kazakhstan [=Shymkent, Chimkent] Area, Pakhtaaraal'skii Distr., highway Tashkent-Samarkand, 5.05.1990 (A.F., A.Z.).

DIAGNOSIS. The male is diagnosed in Azarkina [2002]. The female of this species is similar to *A. m-nigrum* Kulczyński-

Figs 64–75. *Aelurillus muganicus*: 64 — ♂ habitus (paratype); 65 — ♂ palpus, ventral view; 66 — ditto, prolateral view; 67 — embolar division, retrolateral view; 68 — ditto, prolateral view; 69 — ditto, ventral view; 70 — schematic course of insemination ducts; 71 — embolar division, dorsal view; 72 — epigyne (paratype of *A. muganicus*); 73 — spermathecae (paratype of *A. muganicus*); 74 — epigyne (*A. azerbaijanicus*); 75 — spermathecae (*A. azerbaijanicus*). Scale: 64 — 10 mm, 65–69, 71–75 — 0.1 mm.

Рис. 64–75. *Aelurillus muganicus*: 64 — габитус самца (паратип); 65 — палец самца, вентрально; 66 — то же, пролатерально; 67 — эмболярный отдел, ретролатерально; 68 — то же, пролатерально; 69 — то же, вентрально; 70 — схема копуляторных каналов; 71 — эмболярный отдел, дорсально; 72 — эпигина (паратип *A. muganicus*); 73 — сперматека (паратип *A. muganicus*); 74 — эпигина (*A. azerbaijanicus*); 75 — сперматека (*A. azerbaijanicus*). Масштаб: 64 — 10 мм, 65–69, 71–75 — 0,1 мм.



Figs 77–80. *Aelurillus nenilini* (Uzbekistan): 77 — ♂ habitus; 78 — epigyne; 79 — spermathecae; 80 — schematic course of insemination ducts. Scale: 77 — 10 mm, 78–79 — 0.1 mm.

Рис. 77–80. *Aelurillus nenilini* (Узбекистан): 77 — габитус самца; 78 — эпигина; 79 — сперматека; 80 — схема копуляторных каналов. Масштаб: 77 — 10 мм, 78–79 — 0,1 мм.

ki in Kulczyński et Chyzer, 1891, but differs in both its coloration and the structure of the copulatory organs [copulatory pores directed upwards, the epigynal flaps form a more or less E-shaped figure, the epigynal pocket with a deeper cut on its back side (Fig. 78), and the spermathecae are simpler (Fig. 79–80)] [cf. Prószyński, 1979 and Azarkina, 2002].

DISTRIBUTION. Turkmenistan, Uzbekistan, Kazakhstan (Fig. 50).

DESCRIPTION. MALE. See Azarkina [2002]. An improved illustration of the male general appearance is provided here; earlier, I [Azarkina] figured the males with an uncharacteristic colour pattern. The common pattern is shown in Fig. 77.

FEMALE (from Uzbekistan). Measurements. Carapace 3.4 long, 2.4 wide, 1.8 high at PLE. Ocular area 1.2 long, 1.6 wide anteriorly, 1.5 wide posteriorly. Diameter of AME 0.5. Abdomen 3.4 long, 2.8 wide. Cheliceral length 1.2. Clypeal height 0.3. Length of leg segments: leg I — 1.3 + 0.9 + 0.9

+ 0.7 + 0.6; leg II — 1.4 + 1.1 + 0.9 + 0.8 + 0.6; leg III — 2.1 + 1.1 + 1.2 + 1.1 + 0.9; leg IV — 2.0 + 1.1 + 1.4 + 1.4 + 0.9. Leg spination. Leg I: Fm d.1-1-4; Ti pr.1-2, v.1-1-2ap; Mt pr.1-1, v.2-2ap. Leg II: Fm d.1-2-5; Ti pr.1-1, v.1-1-2ap; Mt pr.1-1, v.2-2ap. Leg III: Fm d.1-1-4; Pt pr. and rt.1; Ti d.1-0-0, pr. and rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr. and rt.1-0-2, v.2-2ap. Leg IV: Fm d.1-1-2; Pt pr. and rt.1; Ti d.1-0-0, pr.1-1-1-1, rt.1-1-1, v.1-0-2ap; Mt d.1-1-0, pr.1-1-2, rt.1-0-2, v.1-1-2ap. Coloration. Carapace brown, with dark brown eye field, covered with white and sparse black (on eye field) appressed scales. Clypeus and “cheeks” yellow-brown, covered with white hairs. Chelicerae brown. Abdomen yellow-brown, with no colour-markings, covered with white hairs. Book-lung covers and spinnerets yellow brownish. All legs brownish yellow, with dark brown patches and annulations. Palps yellow. Structure of epigyne and spermathecae as in Figs. 78–80.

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