

New data on the jumping spiders from South Siberia (Aranei Salticidae)

Новые данные о пауках-скакунчиках из Южной Сибири (Aranei Salticidae)

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ABSTRACT. New faunistic data on eight species of salticid spiders from South Siberia are given, including also the description of two new species, *Dendryphantes barguzinensis* sp.n. and *Synageles nigriculus* sp.n. *Yllenus hamifer* Simon, 1882 is new to the fauna of Russia. Besides this, the results of a study of Salticidae from Izmailova's collection are presented, with nine misidentifications corrected.

РЕЗЮМЕ. Приведены новые фаунистические данные о восьми видах пауков семейства Salticidae, включая описание двух новых видов *Dendryphantes barguzinensis* и *Synageles nigriculus* spp.n. *Yllenus hamifer* Simon, 1882 впервые отмечен для фауны России. Кроме этого, приведены результаты изучения сальтицид из коллекции Измайловой, исправлены ошибочные определения девяти видов.

Introduction

This paper is devoted to new faunistic data on the salticid spiders from the Irkutsk Area, Transbaikalia (Buryatia and the Chita Area), and the Amurskaya Area. Izmailova [1989] has recorded 34 species of jumping spiders in the Irkutsk Area and Transbaikalia. In our previous paper [Danilov & Logunov, 1994], 66 species of this family have been listed in Transbaikalia alone. Fourteen salticid species have been reported from the Amurskaya Area [Dunin, 1984].

Data on eight species of Salticidae, including two new ones, are presented here. One more has proved to be new to the fauna of Russia. Besides this, the results of a restudy of the Salticidae deriving from Izmailova's [1989] collection are given, with nine misidentifications established.

Material and methods

Most of the fresh samples studied here are kept

in the Buryat Institute of Biology, Ulan-Ude (BIB). The collection of Izmailova is kept in the Irkutsk State University, Irkutsk (IU). The types of both new species described below are kept in the Zoological Museum of the Moscow University (ZMMU) and in the Institute for Systematics and Ecology of Animals, Novosibirsk (ISE).

Abbreviation used in the text: ap. — apically, d. — dorsally, Fm — femur, Mt — metatarsus, pr. — prolaterally, rt. — retrolaterally, Ti — tibia, v. — ventrally. In the descriptions of the new species, the sequence of leg segments in measurement data is the following: Fm + patella + Ti + Mt + tarsus. All measurements are in mm.

Synopsis of species

Dendryphantes barguzinensis sp.n.

Fig. 1, A-C.

MATERIAL. Holotype ♀ (ZMMU), Buryatia, Kurumkan Distr., Dzherghinsky Reserve, Dzhirga, 9.06.1995.

DIAGNOSIS. The new species differs clearly from other congeners in the structure of the epigyne and spermathecae (Fig. 1, A, B). *D. barguzinensis* shows a very simple structure of the spermathecae as compared with that of other congeners. By this feature, the new species is close to the genus *Macaroesis*, but its precise systematic position is still in need of further studies.

DESCRIPTION. FEMALE. Measurements. Carapace 2.35 long, 2.00 wide. Ocular area 1.05 long, 1.45 wide anteriorly and 1.65 wide posteriorly. Abdomen 3.75 long, 1.75 wide. Length of leg segments: leg I — 1.50 + 0.90 + 0.85 + 0.70 + 0.55; II — 1.05 + 0.75 + 0.55 + 0.55 + 0.50; III — 1.25 + 0.65 + 0.60 + 0.75 + 0.60; IV — 1.55 + 0.80 + 0.95 + 0.90 + 0.65. Leg spination. leg I: Fm pr.2ap., d.1-1-1, Ti v.2-2-2ap., Mt v.2-2ap.; leg II: Fm pr.2ap., d.1-1-1, Ti v.1-1ap., Mt v.2-2ap.; leg III: Fm pr.2ap., d.1-0-2ap., Ti pr.1ap., Mt pr.2ap., r.2ap., v.2ap.; leg IV: d.1-1-3ap., Ti v.1-0-2ap., Mt pr.1-0-1ap., r.1ap., v.2ap. Coloration. Carapace brown, eye field black. Legs

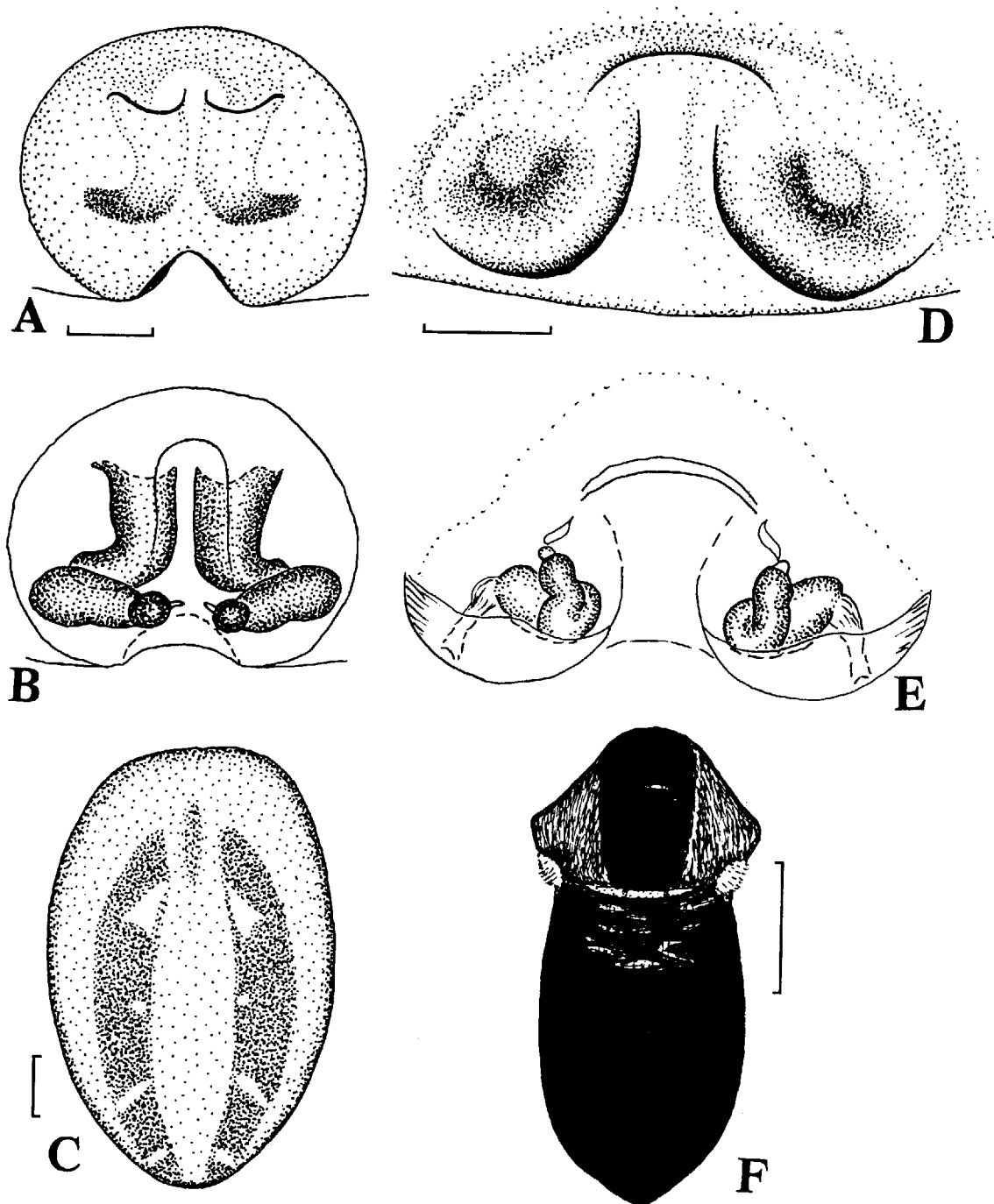


Fig. 1. *Dendryphantes barguzinensis* sp.n. (A-C) and *Synageles nigriculus* sp.n. (D-F): A, D — epigyne, B, E — spermathecae, C, F — female abdomen. Scales: A, B, D, E — 0.1 mm; C, F — 0.5 mm.

Рис. 1. *Dendryphantes barguzinensis* sp.n. (A-C) и *Synageles nigriculus* sp.n. (D-F): A, D — эпигина, B, E — сперматеки, C, F — брюшко самки. Масштаб: A, B, D, E — 0,1 мм; C, F — 0,5 мм.

light brown. Abdomen brown, dorsum with two longitudinal black stripes and four pairs of white spots (Fig. 1, C). Epigyne and spermathecae as shown in Fig. 1, A, B.

MALE unknown.

DISTRIBUTION. The type locality only.

HABITAT. The holotype has been collected in a birch in a willow thicket or in riverside birch stand.

ETYMOLOGY. This species is named after the Barguzin Valley where the type locality is situated.

Dendryphantes rudis (Sundevall, 1832)

MATERIAL. Amur Area, Zeisky Distr.: 2 ♀♀ (BIB), Airport: 19.07.1978, V. Epova; 1 ♂ (BIB), Bolshaya Palpoga River: 22.07.1978, V. Epova; 1 ♂, 1 ♀ (BIB), Zeisk, 29.07.1978, V. Epova

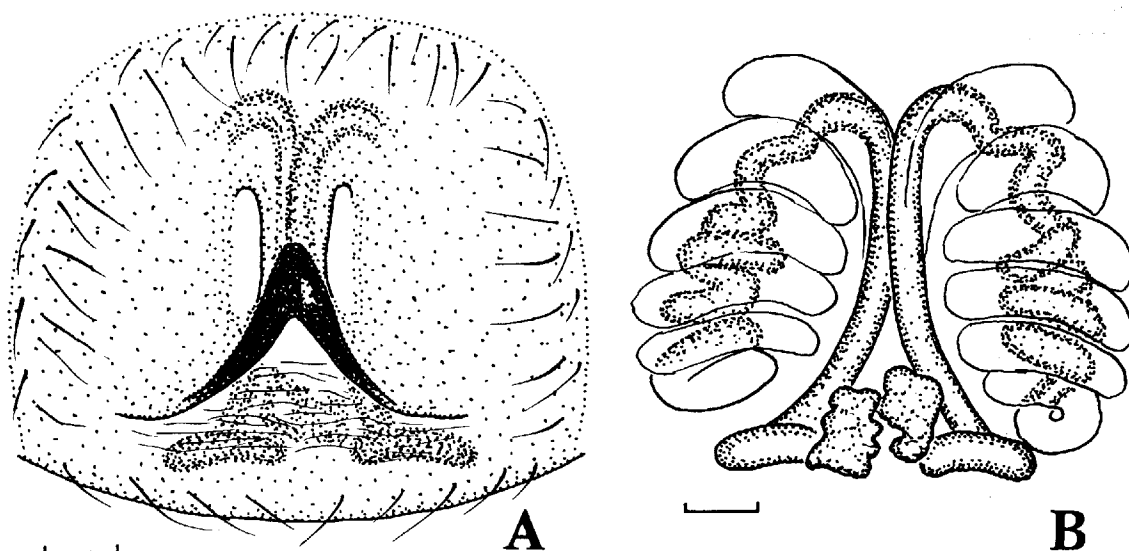


Fig. 2. *Yllenus hamifer* Simon, 1882: A — epigyne, B — spermathecae. Scale: 0.1 mm.

Рис. 2. *Yllenus hamifer* Simon, 1882: A — эпигина, B — сперматеки. Масштаб: 0,1 мм.

COMMENTS. This trans-Palaeartic species is herewith recorded in the Amurskaya Area for the first time.

Euophrys flavoatra (Grube, 1861)

MATERIAL. 1 ♂ (BIB), Buryatia, Tunkinsky Distr., Arshan, mixed forest, 10.08.1994, S. Danilov.

COMMENTS. It is the first record of the species in Transbaikalia. *E. flavoatra* is distributed from the N-Urals to the Russian Far East [Logunov et al., 1993].

Pellenes lapponicus (Sundevall, 1832)

MATERIAL. 1 ♀ (BIB), Buryatia, Khorinsk Distr., 30 km N of Maila, *Populus* and *Larix* forest, 2.09.1996, S. Danilov.

COMMENTS. In Siberia, this Holarctic species has hitherto been recorded in Tuva and the Chita Area [Danilov & Logunov, 1994].

Sitticus cutleri Prószyński, 1980

MATERIAL. 1 ♂ (BIB), Buryatia, Kurumkansky Distr., Dzherghinsky Reserve, Lake Balan-Tamur, mountainous tundra, 19.07.1995, S. Danilov.

COMMENTS. The species displays a Siberian-American distribution pattern and is recorded in Transbaikalia for the first time.

Synageles nigriculus sp.n.

Fig. 1. D-F.

MATERIAL. Holotype ♂ (ZMMU), Buryatia, Kurumkan Distr., Dzherghinsky Reserve, Dzhirga, 11.07.1996, S. Danilov.

Paratype: 1 ♀ (ISE), Amurskaya Area, Khingan Reserve, 1.08.1983, Y. Marusik.

DIAGNOSIS. The species is closely related to *S. ramitus* Andreeva, 1976, which is known from Tajikistan, Afghanistan and Mongolia [Prószyński, 1982], but it is

clearly separated by the shape of the epigyne and spermathecae, namely, *S. nigriculus* has a relatively wider epigyne (Fig. 1, D, E).

DESCRIPTION. FEMALE. Measurements. Carapace 1.55 long, 0.88 wide. Abdomen 1.80 long, 0.88 wide. Length of leg segments: leg I — 0.85 — 0.40 — 0.45 — 0.38 — 0.23; leg II — 0.68 — 0.33 — 0.45 — 0.35 — 0.23; leg III — 0.63 — 0.35 — 0.45 — 0.43 — 0.28; IV — 0.93 — 0.45 — 0.78 — 0.65 — 0.30. Coloration. Carapace black, palps yellow, legs brown. All leg segments but tarsus with dark longitudinal stripes laterally. Sternum dark brown. Abdomen black, with a dark brown scutum anteriorly (Fig. 1, F). Anterior half of abdomen with two lateral spots of pale scales.

DISTRIBUTION. Buryatia and the Amurskaya Area.

HABITAT. The holotype has been collected in a willow tree on riverside, the paratype in a meadow.

ETYMOLOGY. The species epithet derives from the Latin word "nigriculus" meaning "blackish".

Yaginumaella medvedevi Prószyński, 1979

MATERIAL. 2 ♀♀ (BIB), Amurskaya Area, Zeisky Distr., Zolotaya Gora, 10.07.1978, V. Epova.

COMMENTS. This species is known from the Russian Far East (the Khabarovsk and Maritime provinces, the Kurile Islands) [Prószyński, 1979; Dunin, 1984; Logunov & Wesolowska, 1992], NE-China [Tu & Zhu, 1986] and Korea [Wesolowska, 1981]. *Y. medvedevi* is herewith recorded in the Amurskaya Area for the first time, this being the northwesternmost locality of the species.

Yllenus hamifer Simon, 1882

Fig. 2. A, B.

MATERIAL. 1 ♀ (BIB), Buryatia, Pribaikalsk Distr., Goryachinsk, sandy shore of Lake Baikal, 16.07.1996, S. Danilov.

COMMENTS. This species is known from China (the Mongolian Altai and Xinjiang) [Prószyński, 1990] and Kazakhstan [Mikhailov, 1997]. In Russia, it is recorded for the first time. According to Logunov [pers. comm.], the Buryatian specimens may prove to belong to a different species. The problem will be addressed separately by D. Logunov.

Salticidae from Izmailova's collection

Recently, I have been able to re-examine the Salticidae from Izmailova's collection which she referred to in her book entitled "The spider fauna of southern East Siberia" [1989].

35 species of Salticidae were listed by Izmailova [1989] from the southern part of the Krasnoyarsk Province, the Irkutsk Area, Buryatia and the Chita Area, with ten them recorded based on the literature alone. At present there are only 21 salticid species in the Izmailova collection and almost all species are represented by single specimens. In our previous paper [Danilov & Logunov, 1994], some remarks on Salticidae from Izmailova's book have been made, with misidentifications of four species recognized by an analysis of the figures alone. Two of them, *Heliophanus dubius* (C.L. Koch) (identified by Izmailova as *H. simplex* Simon) and *Sitticus floricola* (C.L. Koch) (as *S. rupicola* (C.L. Koch)) are currently absent from the collection. The other two misidentifications, *Dendryphantes biankii* Prosz. (as *Evarcha albaria* (L. Koch)) and *Evarcha* cf. *falcata* (Cl.) (as *E. laetabunda* (C.L. Koch)) are confirmed by the present study. A complete list of corrections is given below (the correct names are given to the right).

Bianor aurocinctus (Ohlert) – *Dendryphantes fusconotatus* (Grube);

Dendryphantes hastatus (Cl.) – *D. rudis* (Sund.);

Evarcha albaria (L. Koch) – *Dendryphantes biankii* Prószyński;

Evarcha laetabunda (C.L. Koch) – *E. cf. falcata* (Cl.) (Logunov [pers. comm.] has informed me that all Siberian samples of *E. falcata* actually belong to a new species that will be described by him separately);

Euophrys frontalis (Walck.) – *Phintella popovi* Prószyński;

Heliophanus cupreus (Walck.) – *H. lineiventris* Simon;

Marpissa radiata (Grube) – the identification is doubtful because the specimen is juvenile;

Pellenes ignifrons (Grube) – *Dendryphantes fusconotatus* (Grube);

Pellenes tripunctatus (Walck.) – *P. sibiricus* (Logunov & Marusik).

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