

## The spider family Segestriidae in the USSR fauna<sup>1)</sup> (Arachnida: Araneae: Haplogynae).

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With 7 figures.

**Abstract:** The spider family Segestriidae comprises in the USSR only the genus *Segestria* LATREILLE 1804, with four species, including *S. turkestanica* n. sp.

The first segestriid, *Segestria senoculata* (LINNAEUS 1758), was reported from Russia, namely from St.-Petersbourg, by CEDERHJELM (1798, cited after KHARITONOV 1932). Recently, PALMGREN (1977) discovered this species in S-Finland and on Gogland Island, Gulf of Finland, USSR, thus having indirectly confirmed the credibility of CEDERHJELM's record which since long (KHARITONOV 1932) had been believed as but dubious.

It was SIMON (1899) who noted our second segestriid, *Segestria florentina* (P. ROSSI 1790), this time from Poti, W-Transcaucasia. Again on the Black Sea coast of the Caucasus, our third species, *Segestria bavarica* C. L. KOCH 1843, was recorded (KHARITONOV 1936, SPASSKY 1937).

Thus, three species of this family, all belonging to the genus *Segestria* LATREILLE 1804, have hitherto been known in the USSR fauna: *senoculata*, *florentina* and *bavarica*.

The present paper deals with the results of a study of various new materials of Segestriidae recently collected in the Crimea, the Caucasus and Middle Asia, with four species of *Segestria* involved, one of them being new to science.

I am deeply obliged to Drs. K. MIKHAILOV, A. NENILIN, S. OVCHINNIKOV and S. ZONSTEIN who kindly made their collections available for study. Besides, I wish to thank particularly Dr. S. GOLOVATCH who not only delivered me for study the material he had collected in the Caucasus together with Prof. J. MARTENS, but also was kind enough as to check the English of the final manuscript.

The materials have been shared between the Zoological Museum of the Moscow State University, Moscow (ZMMU), and the Senckenberg Museum, Frankfurt a. M. (SMF).

<sup>1)</sup> Contributions to the fauna of the Caucasus, conducted by S. I. GOLOVATCH and J. MARTENS, 1981, No. 6. — No. 5: Senckenbergiana biol., 64 (4/6): 393-427, 1984 [for 1983].

*Segestria bavarica* C. L. KOCH 1843.

1843 *Segestria bavarica* C. L. KOCH, Die Arachniden, Nürnberg, 10: 93.

1956 *Segestria bavarica*, — KHARITONOV, Uchyonye zap. Molotov. gos. univ., 10 (1): 30.

**Material:** USSR, Caucasus; Azerbaidjan, Sheki distr., Djugut, 800 m, 21. VI. 1977; 1♀ (ZMMU), leg. P. DUNIN. — Shemakha distr., Astrakhanka, 900 m, in a house, 10. X. 1981; 1♀ (SMF 32598), leg. P. DUNIN. — Shemakha distr., Kaladarasi, 1000 m, 2. VIII. 1982; 1♀ (ZMMU), leg. P. DUNIN. — Georgia, Abkhazia, Sukhumi, 25. VII. 1980; 1♀ (ZMMU), leg. K. MIKHAILOV.

**Remarks:** This species known in C- and S-Europe and in the Caucasus has hitherto been registered within the USSR in Transcarpathia (LEGOTAY 1958) and in the Caucasus (KHARITONOV 1956, TYSHCHENKO 1971), particularly in the Krasnodar Prov. (Khosta, Sochi: KHARITONOV 1936, SPASSKY 1937) and Georgian SSR (Sukhumi, Tkibuli: KHARITONOV 1936, SPASSKY 1937, MKHEIDZE 1968). Therefore, *bavarica* is new to the fauna of Soviet Azerbaidjan.

The known records of this species in Middle Asia (SPASSKY 1952, KHARITONOV 1956, TYSHCHENKO 1971) are erroneous as being based on the works of SPASSKY & LUPPOVA (1945) and ANDREEVA (1975, 1976) each citing a juvenile ♀ from Tadzikistan preliminarily referred to as *bavarica*. This Middle Asian *Segestria*, however, belongs in fact to the new species described below.

*Segestria florentina* (P. ROSSI 1790).

1790 *Aranea florentina* P. ROSSI, Fauna Etrusca, etc., Liburni, 2: 133.

1914 *Segestria florentina*, — SIMON, Arachn. Fr., 6 (1): 109.

1951 *Segestria florentina*, — KHARITONOV, Uchyonye zap. Molotov. gos. univ., 10 (1): 29.

**Material:** USSR, Caucasus, Georgia, Abkhazia, environs of Gagra, 30. VII. 1980; 1♂ (ZMMU), leg. K. MIKHAILOV. — Crimea, environs of Sevastopol, XII. 1982; 2♂ 2♀ (ZMMU), 1♂ 1♀ (SMF 32599), leg. A. NENILIN.

**Remarks:** This species is known to be widespread from S-England, over the Mediterranean, to the Crimea and the Caucasus and has heretofore been registered within the USSR in the Crimea and the Caucasus (KHARITONOV 1956, TYSHCHENKO 1971), particularly in Georgia (Poti: SIMON 1899, VERZHBITSKY 1902, KHARITONOV 1932; Sukhumi, Batumi: KHARITONOV 1936, SPASSKY 1937).

*Segestria senoculata* (LINNAEUS 1758).

1758 *Aranea senoculata* LINNAEUS, Syst. Natur., 10 ed., Holmiae, 1: 622.

1914 *Segestria senoculata*, — SIMON, Arachn. Fr., 6 (1): 110.

1956 *Segestria senoculata*, — KHARITONOV, Uchyonye zap. Molotov. gos. univ., 10 (1): 23.

**Material:** USSR, Caucasus, Georgia, Adjara, Batumi Botanical Garden, 20-150 m, 30. V.-7. VI. 1981; 1♀ (ZMMU), leg. S. GOLOVATCH & J. MARTENS. — Tsikhisdziri N Batumi, 100 m, gardens, 30. V. 1981; 1♂ (ZMMU), leg. S. GOLOVATCH & J. MARTENS.

**Remarks:** This species is widespread throughout Europe (northward up to S-Finland), also registered in the Crimea, the Caucasus, Turkey, and Japan. In the USSR it has been recorded in Leningrad (KHARITONOV 1932, 1956), on Gogland

Island, Gulf of Finland (PALMGREN 1977), in the Crimea (Simferopol, Sevastopol: THORELL 1875, SPASSKY 1927, KHARITONOV 1932, 1956, TYSHCHENKO 1971) and in the Caucasus (KHARITONOV 1956, TYSHCHENKO 1971), in particular in Krasnodar Prov. (Khosta, Sochi: KHARITONOV 1936, SPASSKY 1937) and in Georgian SSR (Tkibuli: MKHEIDZE 1968).

*Segestria turkestanica* n. sp.

Figs. 1-7.

1945 *Segestria bavarica*, — SPASSKY & LUPPOVA, Ent. Obozr., 28: 44 [nec *bavarica* C. L. KOCH 1843].

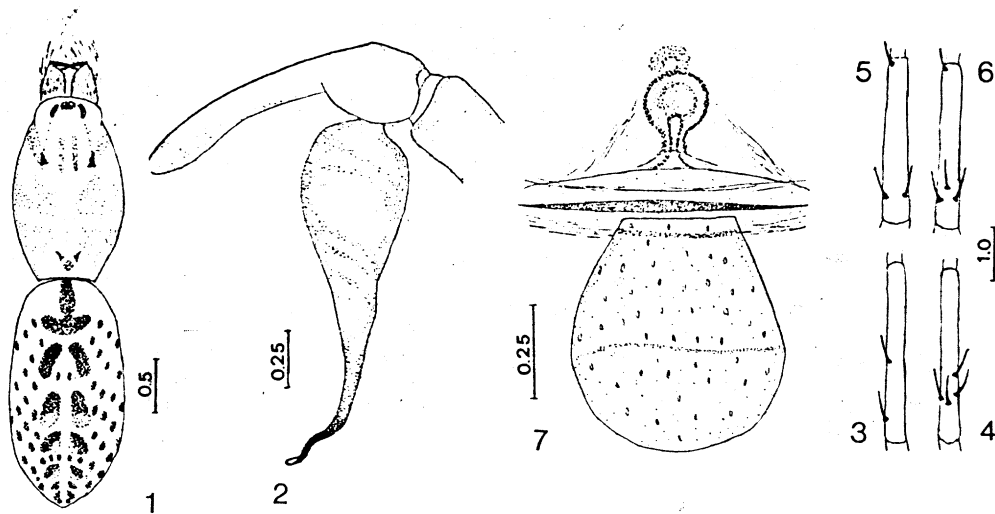
1975 *Segestria bavarica*, — ANDREEVA, Fragm. faun. PAN, 20 (19): 327.

1976 *Segestria bavarica*, — ANDREEVA, Pauki Tadzhikistana, : 17.

Holotype: 1♂ (ZMMU), USSR, Central Asia, Kirghizia, W-Tien-Shang Mts., Chatkal Mt. Ridge, Sary-Chelek Reserve, near Arkit, 1500 m, *Juglans regia* forest, 5. V. 1983, leg. S. ZONSTEIN.

Paratypes: 1♀ juv. (ZMMU), same data as holotype. — 1♂ (ZMMU), Kirghizia, Baubashata Mt. Ridge, Valley Char-Vak, 3. VII. 1981, leg. S. ZONSTEIN. — 1♀ (ZMMU), Kirghizia, Fergana Mt. Ridge, Changet River Valley, 24. VIII. 1982, leg. S. ZONSTEIN. — 1♀ (ZMMU), Kirghizia, Kungei-Alatoo Mt. Ridge, Canyon Cholpon-Ata, *Picea* forest, on rocks, 6. V. 1983, leg. S. OVCHINNIKOV. — 3♀ (ZMMU), Kirghizia, Kirghizsky Mt. Ridge, Canyon Malinovoje, 20 km S of Frunze, 1500 m, 1. VII. 1983, and 1♂ 2♀ (SMF 32600), 3♀ (ZMMU), same locality, 27. VII. 1983, leg. S. OVCHINNIKOV.

Diagnosis: By the body size and abdominal pattern, *turkestanica* n. sp. reminds rather of *bavarica*, though well distinguishable from the latter by the lack of both dark rings and spots on legs and by the different shape of the genitalia. The



Figs. 1-7. *Segestria turkestanica* n. sp. — 1-4) ♂ holotype; 5-7) ♂ paratype. — 1) Habitus, dorsal view; 2) palpus; 3, 5) metatarsus I; 4, 6) metatarsus II; 7) vulva.

latter character brings the new species closer to *florentina*, but *turkestanica* n. sp. is anyway conspicuous in the armament of pretarsus I.

**Description:** ♂. — Total length 7.65 mm, cephalothorax 3.50 mm long and 2.30 mm wide, width of cephalic part 1.10 mm. Ocular field 0.32 mm long and 0.82 mm wide. Diameter of medial eyes 0.15 mm, that of antero-lateral ones 1.16 mm, that of postero-lateral ones 0.15 mm. Cephalothorax dorsally light brown, with dark grey ocular field. Medial sulcus poorly visible. Instead of radial grooves there are dark brown radial stripes, the anteriormost of which is dividing the cephalothorax in cephalic and thoracic portions and is expressed better than the others. Sternum yellow, with pairs of vague brown spots. Labium and maxillae brown, apically white. Chelicerae dark brown, clothed with long dense hairs. Anterior and posterior margins of cheliceral groove with three and two teeth, respectively. Basal and apical joints of chelicerae 1.33 and 0.55 mm long. Coxae, trochantera, as well as femora I-IV yellow; patella I yellowish-grey, patellae II-IV yellow; tibiae, metatarsi and tarsi III-IV yellow, on pairs I-II yellowish-grey-brown. All legs without dark rings or spots. Leg formula as follows:

	femur	patella	tibia	metatarsus	tarsus	total
I	3.60	1.11	3.98	3.31	1.06	13.06
II	3.43	1.10	3.78	3.30	1.05	12.66
III	2.65	1.05	2.95	2.92	0.92	10.49
IV	3.00	1.10	2.99	2.68	0.95	10.72

**Leg armament:** femora I-IV dorsally, antero- and postero-dorsally (denser basally) each with 10-15 long sharp spines all along their length; patellae I-II anteriorly and posteriorly each with one spine apiece, patella III with one anterior spine, patella IV unarmed; tibiae I-II each with 1-1-1 ventral and two apical spines, anteriorly and posteriorly with 1-1-1 spines apiece; tibia III with 1-1 ventral and two apical spines, anteriorly and posteriorly with 1-1 spines apiece; tibia IV ventrally with 1-1-1 spines, apically with two spines, antero- and postero-ventrally with 1-1 spines apiece, posteriorly with 1-1-1 ones; metatarsus I antero-ventrally with one basal, one medial and one apical spine, both the former ones sometimes being absent; metatarsus II with one spine ventro-basally, antero- and postero-ventrally and apically apieces; metatarsus III with two ventro-basal, one antero-ventral, 1-1 postero-ventral and one ventro-apical spine; metatarsus IV with two ventro-basal, one ventro-medial and two ventro-apical spines, antero- and postero-medially with one spine apiece; tarsi unarmed.

Abdomen 4.15 mm long and 2.33 mm wide; shape oblong-oval, colour light yellow, with a dark brown lanceolate basal and pairs of similar angular spots all along abdomen. Latter laterally with small brown spots, ventrally background yellow, with a brown spot in front of epigastric groove and a broad brown stripe extending from epigastric groove to spinnerets. Latter pale yellow. Abdomen entirely clothed with long hairs.

Genitalia very simple, bulbus pyriform, embolus thinly elongate and apically S-shaped.

♀. — Similar to ♂. Total length 9.50 mm, cephalothorax 4.30 mm long and 2.60 mm wide, width of cephalic part 1.90 mm. Ocular field 0.35 mm long and 1.00 mm wide. Diameter of medial eyes 0.18 mm, that of antero- and postero-lateral

ones 0.20 and 0.21 mm, respectively. Cephalothorax dorsally light brown, cephalic part somewhat darker. Medial sulcus indistinct, radial dark stripes very feeble. Sternum light brown, with pairs of dark brown spots. Labium and maxillae dark brown, apically white. Chelicerae and cheliceral groove as in ♂. Basal and apical joints of chelicerae 2.10 and 0.88 mm long, respectively. Coxae, trochantera and femora I-IV, as well as patellae, tibiae, metatarsi and tarsi III-IV yellow; patellae, tibiae, metatarsi and tarsi I-II yellowish-grey-brown. Legs without dark rings or spots. Leg formula as follows:

	femur	patella	tibia	metatarsus	tarsus	total
I	4.10	1.38	3.90	3.26	1.00	13.64
II	3.70	1.36	3.84	3.10	1.00	13.00
III	3.10	1.34	3.30	2.46	0.95	11.35
IV	3.40	1.35	3.30	2.64	1.00	11.69

Leg armament: femora I-IV dorsally, antero- and postero-dorsally each with 6-12 long sharp spines all along their length; patellae I-IV unarmed; tibiae I-II ventrally each with 1-1-1, apically with two, anteriorly and posteriorly with 1-1-1 spines apiece; tibia III with 1-1 ventral and two apical spines, anteriorly and posteriorly with 1-1-1 apiece; tibia IV with 1-1-1 ventral and two apical spines, anteriorly without them, posteriorly with 1-1 spines; metatarsus I ventrally with two basal and one apical spine; metatarsus II ventrally with three (rarer two) basal and one apical spine; metatarsus III ventrally with two basal and one apical spine; metatarsus IV ventrally with two (sometimes one) basal and one apical spine; tarsi unarmed.

Abdomen 5.20 mm long and 3.00 mm wide, colour yellow, pattern as in ♂. Vulva as in Fig. 7.

Remarks: Besides the above localities, *turkestanica* n.sp. misidentified as *bavarica* is known to occur in Ura-Tyube (SPASSKY & LUPPOVA 1945) and Kvak, Kondara, Ghissar Mt. Ridge, both in Tadjikistan (ANDREEVA 1975, 1976). The new species inhabits various crevices in rocks, occurs under bark and stones, as well as in burrows from the foothill to the middle mountainous belts up to a height of 2000 m, within the zones of broadleaved and coniferous forests. The general distribution covers the Ghissar-Darvaz and W-Tien-Shang Mountains, Middle Asia.

#### Резюме.

Пауки семейства Segestriidae содержат в фауне СССР только род *Segestria* LATREILLE 1804 с четырьмя видами, включая *S. turkestanica* n.sp.

#### Zusammenfassung.

Die Spinnen-Familie Segestriidae ist in der UdSSR bisher nur mit vier Arten der Gattung *Segestria* LATREILLE 1804, einschließlich *S. turkestanica* n.sp., vertreten.

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