

# New and little-known species of *Leptyphantes* MENGE 1866 from the Soviet Union

(Arachnida: Araneae: Linyphiidae).

By

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With 113 figures.

**A b s t r a c t:** Illustrated descriptions are given for 16 new species of *Leptyphantes* MENGE 1866: *contortus* n. sp., *abditus* n. sp. (Caucasus), *spasskyi* n. sp. (Azov Sea coast, Uralsk Area, Kazakhstan), *badkhyzensis* n. sp. (Turkmenia), *macer* n. sp., *plumatus* n. sp., *tienschangensis* n. sp., *cinereus* n. sp., *supremus* n. sp., *altus* n. sp., *solivagus* n. sp., *sacer* n. sp., *rupeus* n. sp. (Tien-Shang), *sibiricus* n. sp., *flexilis* n. sp., *distichus* n. sp. (Siberia). The first descriptions of ♂♂ and redescriptions of ♀♀ are presented for *vittatus* SPASSKY 1941, *luteipes* (L. KOCH 1879), *cerinus* (L. KOCH 1879) and *karpinskii* (O. PICKARD-CAMBRIDGE 1873).

The genus *Leptyphantes* MENGE 1866, the largest among the Linyphiidae and comprising about 400 species, has hitherto been quite poorly known in the USSR. During studies on the linyphiid fauna of different parts of the Soviet Union, numerous *Leptyphantes* have emerged, 16 of which being described herein as new to science. Besides, of several further species ♂♂ have been discovered for the first time.

I feel particularly obliged to Drs. S. ALEXEEV, K. ESKOV, V. FET, S. GOLOVATCH, YU. MARUSIK, K. MIKHAILOV, V. NIKOLAEV, S. OVCHINNIKOV, T. PAVLENKO, A. RYVKIN, S. TOMS and S. ZONSTEIN for providing me with the materials, upon which the present paper is based.

The type specimens have been shared between the following institutions: Zoological Institute of the USSR Academy of Science, Leningrad (ZIL), Zoological Museum of the Moscow State University (ZMMU), and Senckenberg Museum, Frankfurt a. M. (SMF).

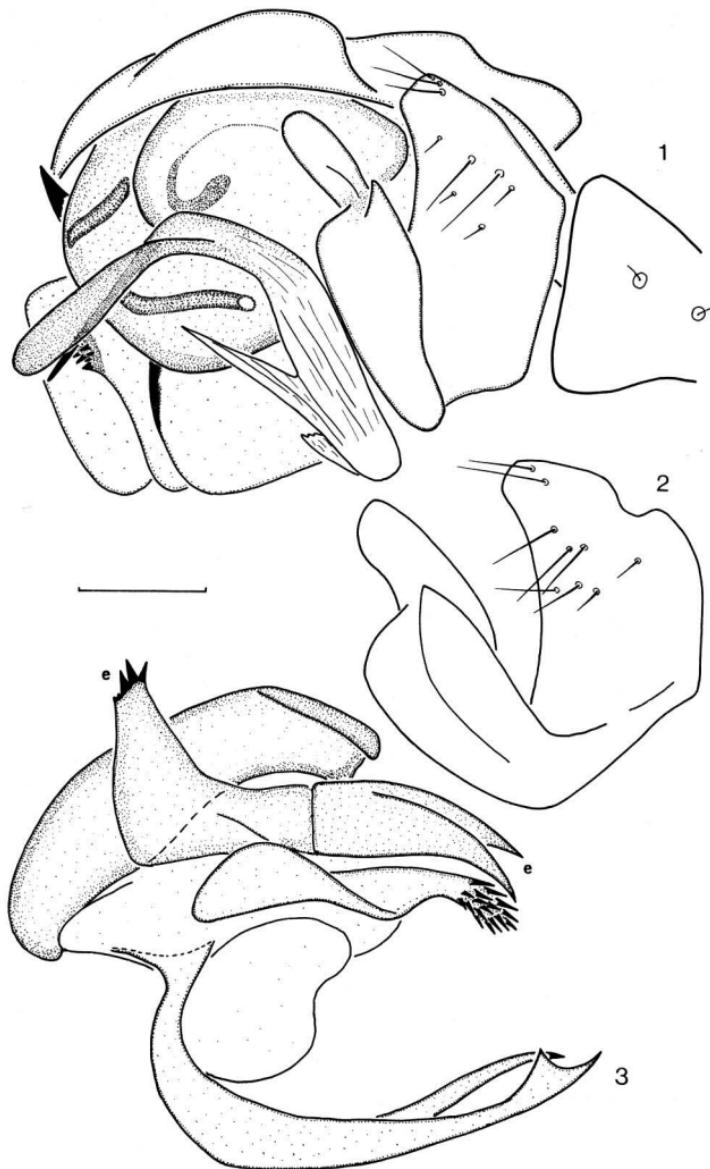
All measurements are given in mm; scale = 0·1 mm, except if otherwise indicated. PME = posterior median eyes.

## *Leptyphantes contortus* n. sp.

Figs. 1-5.

**Holotype:** ♂ (ZIL), USSR, Caucasus, Georgia, Lagodekhi State Reserve, 1950 m, litter, 30. VII. 1982, leg. YU. MARUSIK.

**Paratypes:** 1 ♂ 3 ♀ (ZIL), same locality and date as holotype. — 2 ♂ 2 ♀ (SMF 32154), ♂ ♀ (ZMMU), Lagodekhi State Reserve, 2900 m, subalpine meadow, 14. VII. 1982, leg. YU. MARUSIK.



Figs. 1-3. *Lepthypantes contortus* n. sp.; ♂ paratype. — 1) left palp; 2) paracymbium; 3) embolic division (e = embolus).

**Diagnosis:** This species belongs to the *tenuis*-group, by the form of the lamella characteristic similar to *jacksonoides* VAN HELSDINGEN 1977 and *spiniger* SIMON 1929, while by the shape of the epigyne it seems especially related to *tenebricoloides* SCHENKEL 1938. Well distinguishable by the absence of teeth on the paracymbium (as in *tenebricoloides*), presence of a process at the basal part of the embolus provided with several small teeth (Fig. 3), as well as by certain details of both lamella characteristic and epigyne.

**Description:** ♂: Total length 2.30. Carapace: 1.00 long, 0.80 wide, brownish-yellow. PME separated by their D. Sternum: 0.60 long, 0.65 wide, dark grey. Chelicerae: 0.63 long, anterior margin with three teeth. Legs yellow-brown. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. All metatarsi with one dorsal spine. TmI 0.23.

Legs:		Fe	Pt	Ti	Mt	Ta	Total
I	♂	1.15	0.30	1.20	1.30	0.88	4.83
	♀	1.25	0.35	1.25	1.20	0.85	4.90
II	♂	1.10	0.30	1.10	1.20	0.75	4.45
	♀	1.20	0.35	1.15	1.10	0.75	4.55
III	♂	1.00	0.25	0.90	0.95	0.63	3.73
	♀	1.05	0.30	1.00	0.95	0.60	3.90
IV	♂	1.20	0.30	1.15	1.25	0.95	4.85
	♀	1.25	0.35	1.25	1.20	0.70	4.75

**Palp (Figs. 1-3):** Cymbium proximally with a small rounded outgrowth. Paracymbium toothless. Lamella characteristica about midlength branching into two arms, one wider and terminally rounded sheathes the narrower and pointed one. Embolus with a proximal process bearing several apical small teeth. Abdomen: 1.35 long, 0.90 wide, dorsally pale, with darker transverse wave stripes.

♀: Total length 2.55. Carapace: 1.15 long, 0.90 wide, brownish-yellow. PME separated by their D. Sternum: 0.55 long, 0.60 wide, dark grey. Chelicerae: 0.63 long, anterior margin with three teeth. Legs yellow-brown. TmI 0.17. Chaetotaxy as in ♂. Abdomen: 1.95 long, 1.20 wide, coloration as in male. Epigyne and vulva as in Figs. 4-5.

### *Lepthyphantes abditus* n. sp.

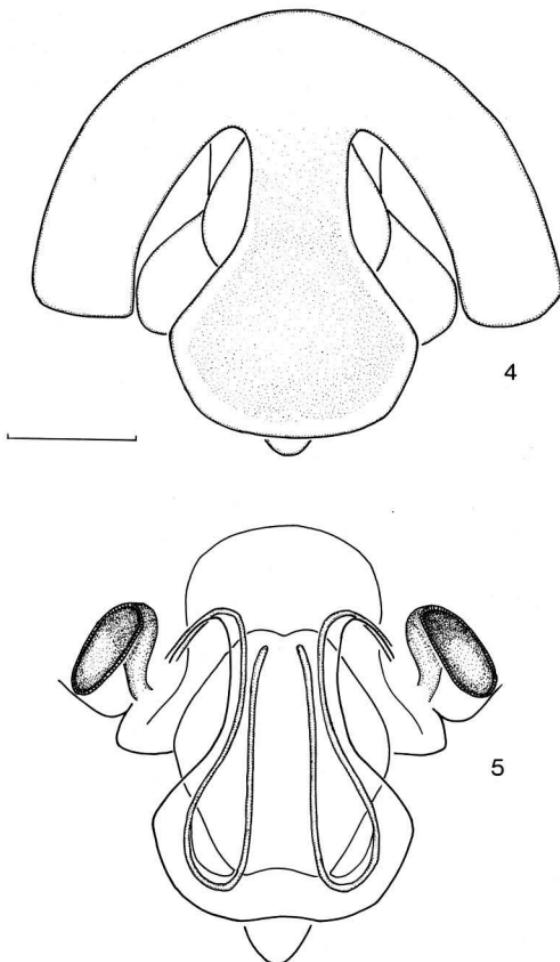
Figs. 6-8.

**Holotype:** ♂ (ZIL), USSR, Caucasus, N-Osetia, N slope of Kalpersky Mt. Ridge, 2850 m, subalpine meadow, 28. VII. 1982, leg. S. ALEXEEV.

**Diagnosis:** This species is characterized by its leg chaetotaxy, proximal cymbial process with two swellings, paracymbium with four teeth, as well as by the form of the lamella characteristica.

**Description:** ♂ (♀ unknown): Total length 2.40. Carapace: 1.15 long, 0.85 wide, pale brown, with a narrow black margin. PME separated by their D. Sternum: 0.60 long/wide, dark grey. Chelicerae: 0.55 long, anterior margin with two teeth. Legs pale brownish-yellow. Tibiae I-IV with two dorsal spines, tibiae II-III with one retrolateral and two ventral spines, tibia IV with one pro-, one retrolateral and two ventral spines. All metatarsi with one dorsal spine. Metatarsus I with two ventral rows of thin long hairs directed distally. TmI 0.18.

Legs:	Fe	Pt+Ti	Mt	Ta	Total
I	1.65	2.00	1.70	0.95	6.30
II	1.45	1.70	1.50	0.75	5.40
III	1.15	1.30	1.15	0.55	4.15
IV	1.50	1.70	1.50	0.80	5.50



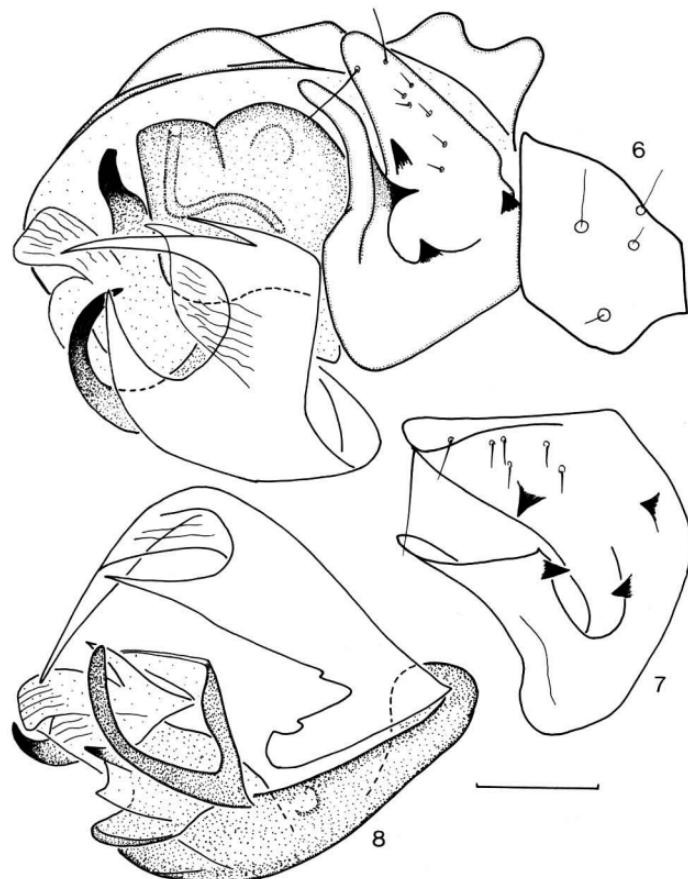
Figs. 4-5. *Lepthyphantes contortus* n. sp.; ♀ paratype. — 4) epigyne; 5) vulva.

Palp (Figs. 6-8): Cymbium proximally with a small process bearing two swellings. Paracymbium with four teeth. Lamella characteristica massive, with a deep notch at midlength. Abdomen: 1.40 long, 0.90 wide, dorsally pale, with a grey axial stripe on anterior part, with grey transverse stripes on posterior part.

### *Lepthyphantes spasskyi* n. sp.

Figs. 9-16.

Holotype: ♂ (ZIL), USSR, Kazakhstan, Uralsk Area, 5 km W of Dzhanebek, forest stripe in steppe, litter, 16. IX. 1982, leg. K. MIKHAILOV.

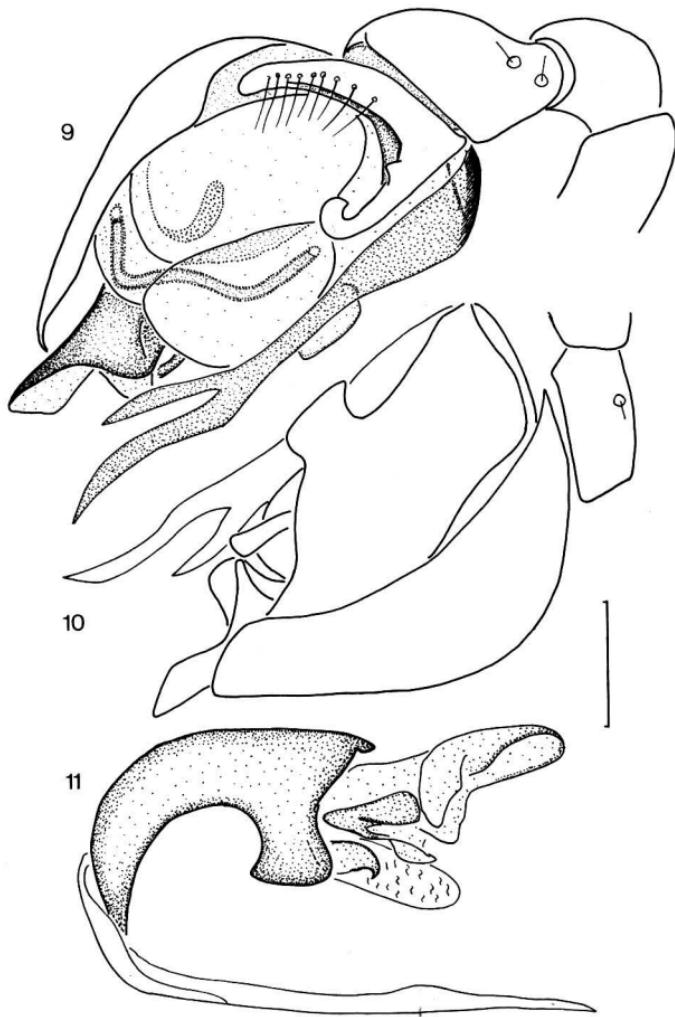


Figs. 6-8. *Leptyphantes abditus* n. sp.; ♂ holotype. — 6) left palp; 7) paracymbium; 8) embolic division.

**Paratypes:** 2 ♀ (SMF 32155), same locality and date as holotype. — 3 ♂ 2 ♀ (ZIL), Ukraine, Zaporozhye Area, near Berdyansk, 1938, leg. V. NIKOLAEV. — ♂ (SMF 32167), 1 ♂ 2 ♀ (ZMMU), Kazakhstan, Aral Sea, Barsakelmes Island, V. 1982; leg. T. PAVLENKO.

**Diagnosis:** This species is related to both *keyserlingi* (AUSSERER 1867) and recently revalidated *quadrimaculatus* KULCZYŃSKI 1898 (s. MILLER & ŽITŇANSKÁ 1976), but well distinguishable by the form of the paracymbium, structure of the distal part of the lamella characteristic, as well as by the rhomboid scapus of the epigyne.

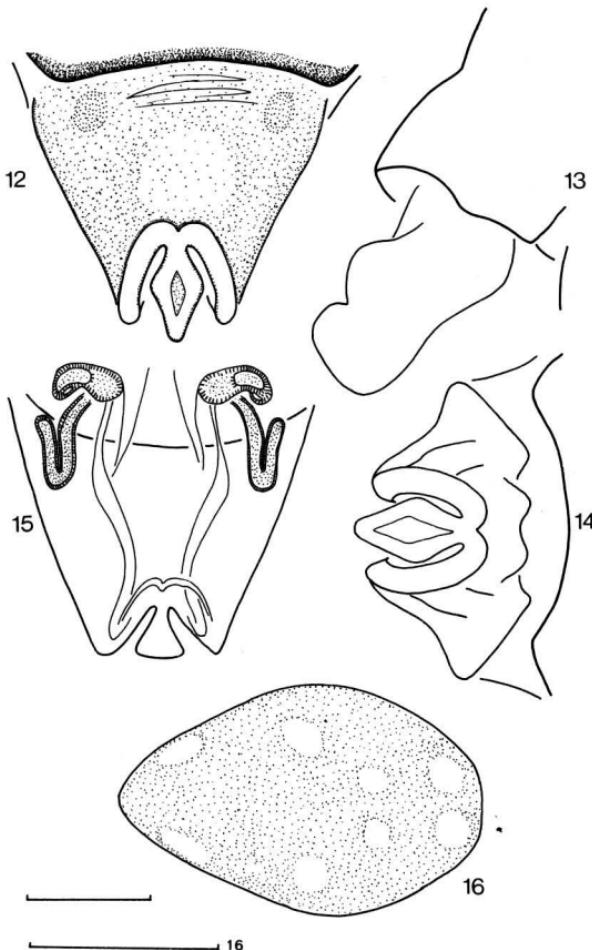
**Description:** ♂: Total length 1.63. Carapace: 0.78 long, 0.65 wide, grey-brown. PME separated by their D. Sternum: 0.40 long/wide, dark grey. Chelicerae



Figs. 9-11. *Leptyphantes spasskyi* n. sp.; ♂ paratype. — 9-10) left palp; 11) embolic division.

0.30 long. Legs greyish-yellow. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine, tibiae III-IV with one ventral spine apically. Metatarsi I-III with one dorsal spine. TMI 0.23.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	0.75	0.95	0.65	0.55	2.90
	♀	0.70	0.88	0.60	0.53	2.71
II	♂	0.65	0.83	0.58	0.53	2.59
	♀	0.65	0.78	0.55	0.45	2.43
III	♂	0.55	0.63	0.48	0.43	2.09
	♀	0.58	0.55	0.43	0.35	1.91
IV	♂	0.75	0.93	0.68	0.55	2.91
	♀	0.75	0.88	0.63	0.50	2.76



Figs. 12-16. *Leptyphantes spasskyi* n.sp.; ♀ paratype. — 12-14) epigyne; 15) vulva; 16) abdomen (dorsal view, scale = 0.5 mm).

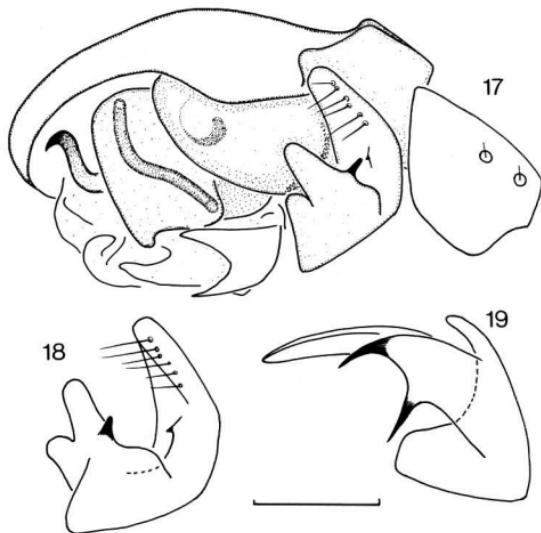
Palp (Figs. 9-11): Well sclerotized. Lamella characteristic long, bifid, lower part being longer than upper one. Abdomen: 0.88 long, 0.60 wide, dorsal pattern as in Fig. 16.

♀: Total length 1.75. Carapace: 0.75 long, 0.60 wide, grey-brown. PME separated by their R. Sternum: 0.42 long/wide, dark grey. Chelicerae: 0.33 long, anterior margin with three teeth. Legs greyish-yellow. TmI 0.24. Chaetotaxy as in ♂. Abdomen: 0.95 long, 0.78 wide, dorsal pattern as in Fig. 16. Epigyne and vulva as in Figs. 12-15.

### *Leptyphantes badhkyzensis* n.sp.

Figs. 17-19.

Holotype: ♂ (ZIL), USSR, Turkmenia, Badhkyz, Kushka, near Morgunovka, under stones, 5. XII. 1976, leg. V. FET.



Figs. 17-19. *Leptyphantes badkyzensis* n. sp.; ♂ holotype. — 17) left palp; 18) paracymbium; 19) lamella characteristicata.

**Diagnosis:** This species is characterized by the form of the paracymbium, as well as by the short lamella characteristicata with a pronounced notch.

**Description:** ♂ (♀ unknown): Carapace: 0.95 long, 0.65 wide, brown. PME separated by their D. Sternum: 0.45 long/wide, brown. Chelicerae: 0.35 long, anterior margin with two teeth. Tibia II with two dorsal, one retrolateral and one ventral spine. Other legs and abdomen missing. Palp (Figs. 17-19): Cymbium with a short keel-like proximal process. Paracymbium with two teeth, one being almost wanting. Lamella characteristicata very short, apically with a pronounced notch.

**Remarks:** DENIS (1958) described *afghanus* DENIS 1958 by a single ♀ from the mountains (at 2500 m a. s. l.) of Zarmast, Herat, Afghanistan, belonging to the *mughi*-group. It is possible that *badkyzensis* n. sp. is actually the unknown ♂ of *afghanus*.

### *Leptyphantes macer* n. sp.

Figs. 20-26.

**Holotype:** ♂ (ZIL), USSR, Kirghizia, W-Tien-Shang, Chatkal Mt. Ridge, Sary-Chelek State Reserve, 1500 m, near Arkit, *Juglans regia* forest, litter, 4. V. 1983, leg. A. TANASEVITCH.

**Paratypes:** ♀ (ZIL), same locality and date as holotype. — ♀ (ZMMU), W-Tien-Shang, Baubashata Mt. Ridge, 1400 m, near Yarodar, *Juglans regia* forest, litter, 9. V. 1983, leg. A. TANASEVITCH.

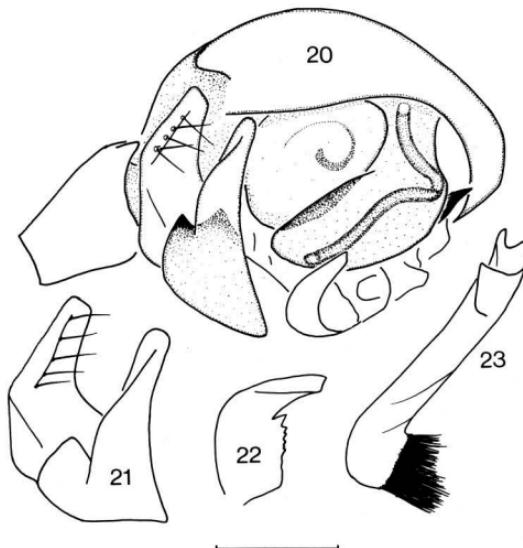
**Diagnosis:** This species is characterized by the short lamella characteristicata similar in shape to those of *cornutus* SCHENKEL 1927 and *auruncus* BRIGNOLI 1979, as well as by the presence in the proximal part of the embolus of a brush and certain details of both epigyne and vulva.

Description: ♂: Total length 1·70. Carapace: 0·80 long, 0·63 wide, greyish-yellow, with a grey polygonal medial spot and darker margin. PME separated by their D. Sternum: 0·45 long/wide, dark grey. Chelicerae: 0·35 long, anterior margin with three teeth. Legs yellow. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibiae II-IV with one retrolateral spine. All metatarsi with one dorsal spine. TmI 0·11.

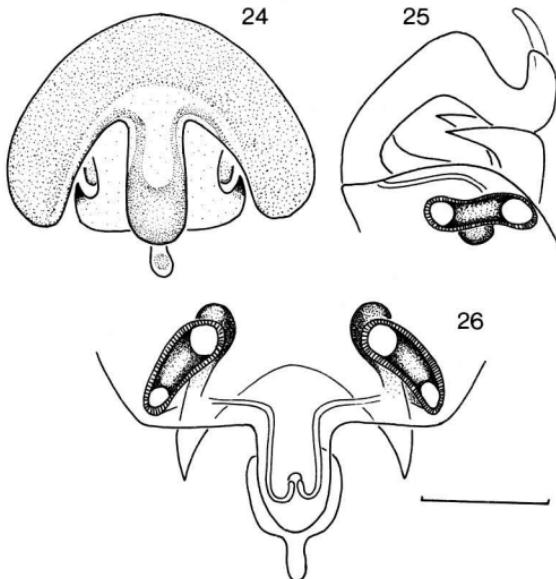
Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	0·88	1·10	0·83	0·58	3·39
	♀	0·83	1·00	0·73	0·50	3·06
II	♂	0·83	1·00	0·73	0·53	3·09
	♀	0·75	0·95	0·65	0·43	2·78
III	♂	0·65	0·78	0·60	0·40	2·43
	♀	0·65	0·75	0·55	0·40	2·35
IV	♂	0·88	1·13	0·83	0·53	3·37
	♀	0·85	1·00	0·73	0·48	3·06

Palp (Figs. 20-23): Cymbium proximally without outgrowths. Lamella characteristic short. Embolus with a proximal brush. Abdomen: 0·90 long, 0·55 wide, grey.

♀: Total length 2·08. Carapace: 0·85 long, 0·67 wide, greyish-yellow, with polygonal medial spot and darker margin. PME separated by their D. Sternum: 0·43 long/wide, dark grey. Chelicerae: 0·36 long, anterior margin with three teeth. Legs yellow. TmI 0·21. Chaetotaxy as in ♂. Abdomen: 1·50 long, 0·82 wide, grey. Epigyne and vulva as in Figs. 24-26.



Figs. 20-23. *Leptyphantes macer* n. sp.; ♂ holotype. — 20) right palp; 21) paracymbium; 22) lamella characteristic; 23) embolus.



Figs. 24-26. *Leptyphantes macer* n. sp.; ♀ paratype. — 24-25) epigyne; 26) vulva.

### *Leptyphantes plumatus* n. sp.

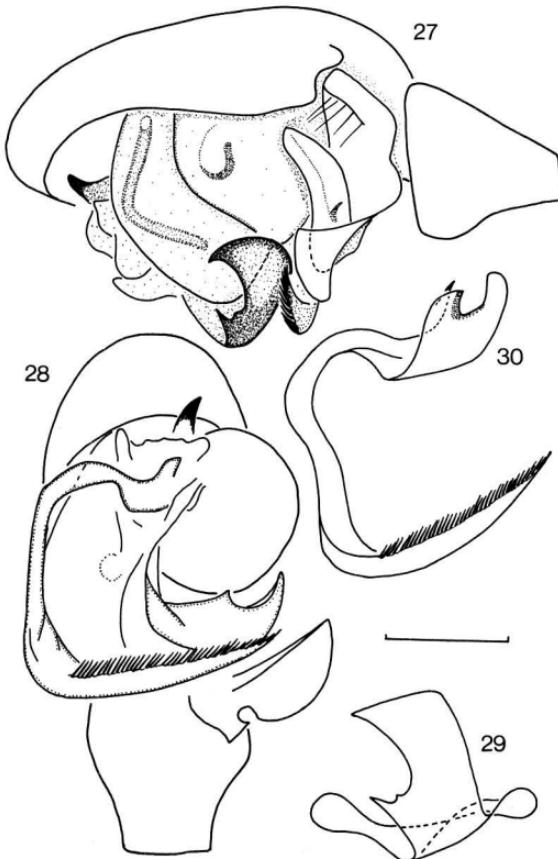
Figs. 27-34.

**Holotype:** ♂ (ZIL), USSR, Kirghizia, W-Tien-Shang, Baubashata Mt. Ridge, near Yarodar, 1350 m, *Juglans regia* forest, litter, 9. V. 1983, leg. A. TANASEVITCH.

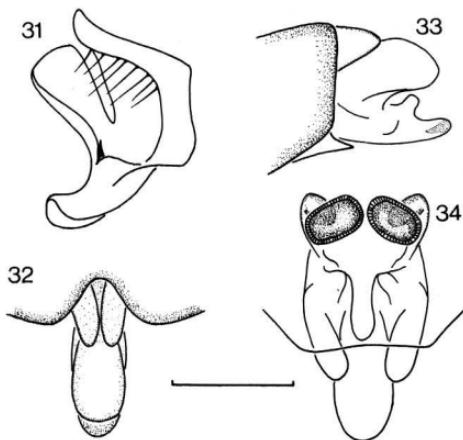
**Paratypes:** 3 ♂ 3 ♀ (ZIL), 3 ♂ 3 ♀ (SMF 32156), 3 ♂ 3 ♀ (ZMMU), same locality and date as holotype. — 5 ♂ 4 ♀ (ZMMU), Baubashata Mt. Ridge, near Arslanbob, 2200 m, dry subalpine meadow, under stones, 1. X. 1983, leg. K. ESKOV. — ♂ 3 ♀ (ZMMU), Baubashata Mt. Ridge, Kurgan-Yar Valley, 1800 m, *Juglans regia* forest, litter, 1. VI. 1979, leg. S. ZONSTEIN. — 4 ♀ (ZMMU), Chatkal Mt. Ridge, Sary-Chelek State Reserve, 1300 m, near Arkit, *Juglans regia* forest, litter, 29. IV. 1983, leg. S. ZONSTEIN & A. TANASEVITCH.

**Diagnosis:** This species is characterized by the form of the paracymbium, embolus, and lamella characteristic, as well as by the structure of the epigyne. By the shape of the proximal part of the embolus this species is similar to *cinereus* n. sp. and, to some degree, to *uzbekistanicus* TANASEVITCH 1983.

**Description:** ♂: Total length 1.55. Carapace: 0.75 long, 0.60 wide, yellowish grey, with a narrow dark margin. PME separated by their 2/3 D. Sternum: 0.38 long, 0.40 wide, dark grey. Chelicerae: 0.38 long, anterior margin with three teeth. Legs yellow. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibiae II-IV with one retrolateral spine. Metatarsi I-III with one dorsal spine. TmI 0.21.



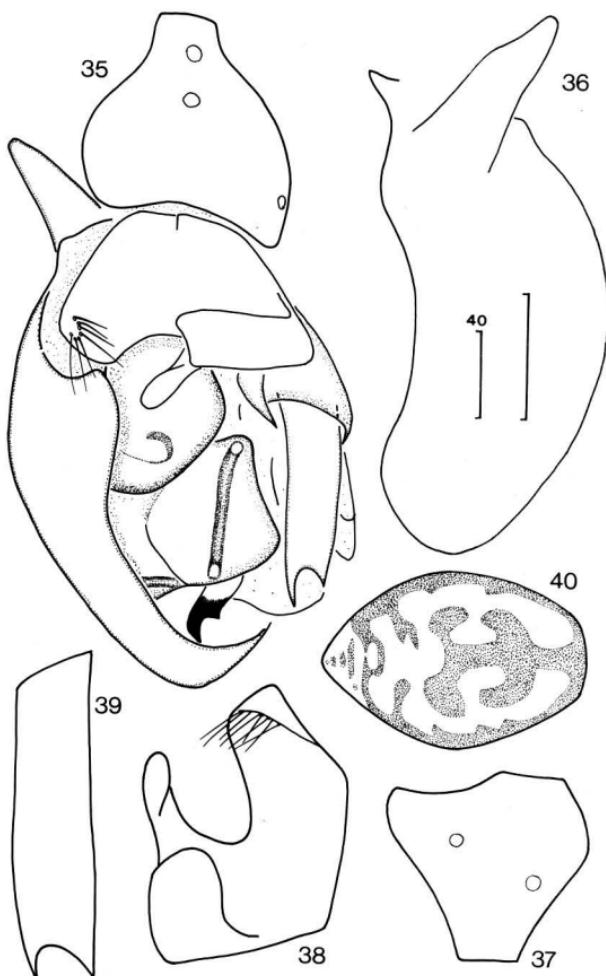
Figs. 27-30. *Leptphyphantes plumatus* n.sp.; ♂ paratype. — 27-28) left palp; 29) lamella characteristica; 30) embolus.



Figs. 31-34. *Leptphyphantes plumatus* n.sp.; ♂♀ paratypes. — 31) paracymbium; 32-33) epigyne; 34) vulva.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	0.83	1.03	0.70	0.55	3.11
	♀	0.88	1.10	0.75	0.56	3.29
II	♂	0.75	0.95	0.63	0.50	2.83
	♀	0.83	0.95	0.73	0.50	3.01
III	♂	0.63	0.70	0.50	0.40	2.23
	♀	0.75	0.83	0.63	0.40	2.61
IV	♂	0.88	1.00	0.75	0.53	3.16
	♀	0.93	1.00	0.85	0.51	3.39

Palp (Figs. 27-31): Paracymbium with one tooth. Embolus well elongate, curved, proximally ciliate. Lamella characteristica short, pince-shaped. Abdomen: 0.90 long, 0.60 wide, dark grey.



Figs. 35-40. *Leptyphantes tienschangensis* n. sp.; ♂ paratype. — 35) left palp; 36) cymbium (caudal view); 37) palpal tibia (dorsal view); 38) paracymbium; 39) lamella characteristica; 40) abdomen (dorsal view, scale = 0.5 mm).

♀: Total length 2.13. Carapace: 0.88 long, 0.65 wide, greyish-brown. PME separated by their R. Sternum: 0.45 long/wide, black brown. Chelicerae: 0.38 long, anterior margin with three teeth. Legs brownish-yellow. TmI 0.23. Chaetotaxy as in ♂. Abdomen: 1.40 long, 0.88 wide, black. Epigyne and vulva as in Figs. 32-34.

### *Leptyphantes tienschangensis* n. sp.

Figs. 35-42.

**Holotype:** ♂ (ZIL), USSR, Kirghizia, N-Tien-Shang, Terskey-Alatau Mt. Ridge, Dzhelandy Valley, 2000-2500 m, *Picea* forest, litter, 30. VIII. 1979, leg. S. ZONSTEIN.

**Paratypes:** ♀ (ZIL), same locality and date as holotype. — ♂ ♀ (ZIL), Terskey-Alatau Mt. Ridge, near Chon-Kyzyl-Su River, 2600 m, *Picea* forest, moss, 2. IX. 1983, leg. A. RYVKIN. — 4 ♀ (ZMMU), N-Tien-Shang, Kirghizsky Mt. Ridge, 30 km S of Frunze, Ala-Archa Valley, 1600 m, 28. VI. 1983, leg. S. OVCHINNIKOV. — 2 ♂ 2 ♀ (ZMMU), 2 ♂ 2 ♀ (SMF 32157), Kazakhstan, N-Tien-Shang, N slope of Zailiysky-Alatau Mt. Ridge, 1800 m, Alma-Ata State Reserve, 30. VIII. 1983, leg. YU. MARUSIK.

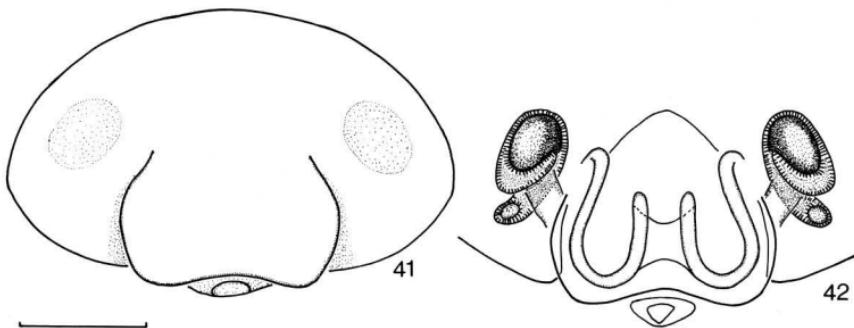
**Diagnosis:** This species belongs to the *mughi*-group and is characterized by the presence of a conical proximal cymbial process, armament of the metatarsi of legs. By the form of the lamella *characteristica* similar to *pyrenaeus* DENIS 1953, and, partly, to *frigidus* SIMON 1884; by the shape of the epigyne similar to many species of this group.

**Description:** ♂: Total length 2.30. Carapace: 1.13 long, 1.00 wide, yellowish-brown, with darker margin. PME separated by their D. Sternum: 0.63 long/wide, dark grey. Chelicerae: 0.50 long, anterior margin with two teeth. Legs pale brown. Tibiae I-IV with two dorsal spines. Tibia I with one pro-, one retrolateral and three (sometimes four) ventral spines, tibia II with one retrolateral and two ventral spines. Metatarsi I-II with two dorsal, III-IV with one dorsal spine. TmI 0.21.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	1.55	2.00	1.65	0.95	6.15
	♀	1.30	1.60	1.15	0.80	4.85
II	♂	1.30	1.55	1.25	0.75	4.85
	♀	1.10	1.30	0.95	0.70	4.05
III	♂	1.05	1.15	0.95	0.55	3.70
	♀	0.80	1.05	0.80	0.50	3.15
IV	♂	1.40	1.55	1.25	0.70	4.90
	♀	1.30	1.45	1.05	0.65	4.45

**Palp (Figs. 35-39):** Cymbium proximally with a conical process. Paracymbium toothless. Lamella *characteristica* parallel-sided, apically with a notch. Abdomen: 1.25 long, 0.78 wide, dorsally pale, with grey pattern as in Fig. 40.

♀: Total length 2.75. Carapace: 1.20 long, 0.85 wide, coloration as in male. PME separated by their R. Sternum: 0.60 long/wide, dark grey. Chelicerae: 0.50 long, anterior margin with three teeth. Legs pale brown. TmI 0.23. Chaetotaxy as in ♂. Abdomen: 1.83 long, 1.20 wide, dorsal pattern as in Fig. 40. Epigyne and vulva as in Figs. 41-42.



Figs. 41-42. *Leptphyphantes tienschangensis* n. sp.; ♀ paratype. — 41) epigyne; 42) vulva.

### *Leptphyphantes cinereus* n. sp.

Figs. 43-49.

**Holotype:** ♂ (ZIL), USSR, Kirghizia, N-Tieng-Shang, Terskey-Alatau Mt. Ridge, near Chon-Kyzyl-Su River, 2600 m, *Picea* forest, moss, 1.IX. 1983, leg. A. RYVKIN.

**Paratypes:** ♂ 2 ♀ (ZIL), ♂♀ (SMF 32158), ♀ (ZMMU), Kirghizia, N-Tien-Shang, Kungey-Alatau Mt. Ridge, Chon-Uryuk-Ty Valley, 1800 m, *Picea* litter, 9.IX. 1983, leg. A. RYVKIN.

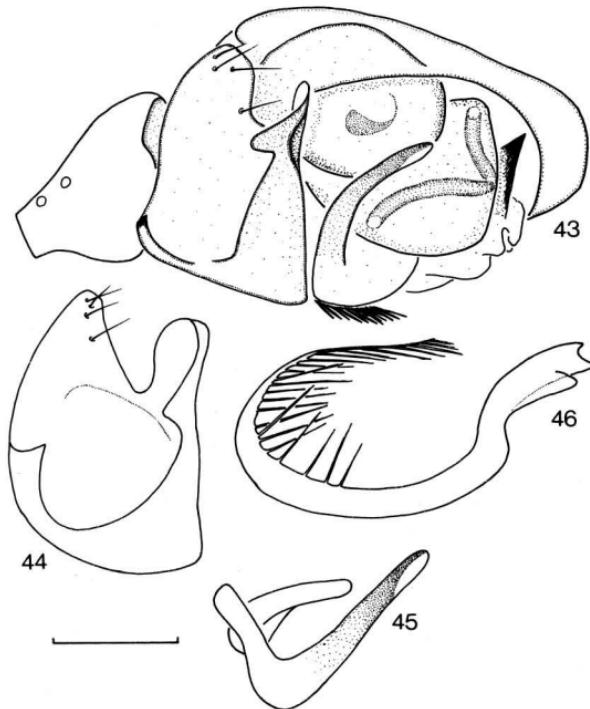
**Diagnosis:** This species is characterized by the structure of both lamella characteristica and embolus (latter having certain similarities with that of *plumatus* n. sp.), as well as by the scapus of the epigyne.

**Description:** ♂: Total length 1.70. Carapace: 0.80 long, 0.63 wide, greyish-yellow. PME separated by their 2/3 D. Sternum: 0.48 long/wide, dark grey. Chelicerae: 0.30 long, anterior margin with three teeth. Legs greyish-yellow. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III with one dorsal spine. TmI 0.24.

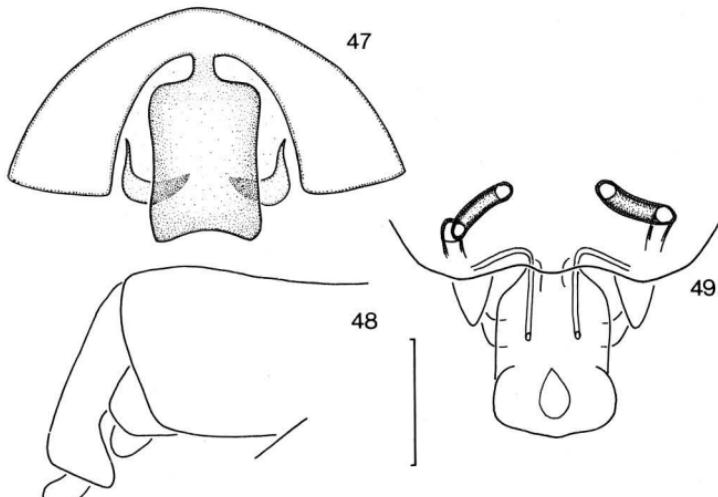
Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	0.70	0.88	0.63	0.53	2.74
	♀	0.63	0.85	0.53	0.48	2.49
II	♂	0.65	0.81	0.55	0.48	2.49
	♀	0.58	0.76	0.50	0.43	2.27
III	♂	0.60	0.71	0.50	0.38	2.19
	♀	0.53	0.68	0.43	0.38	2.02
IV	♂	0.78	0.98	0.73	0.50	2.99
	♀	0.68	0.88	0.53	0.46	2.60

**Palp (Figs. 43-46):** Cymbium proximally without outgrowth. Lamella characteristica as a thin blade-like ribbon. Embolus on proximal half with a row of setoid spines. Abdomen: 0.93 long, 0.55 wide, dark grey.

♀: Total length 1.75. Carapace: 0.75 long, 0.55 wide, greyish-brown. PME separated by their 2/3 D. Sternum: 0.43 long/wide, black-brown. Chelicerae: 0.28 long, anterior margin with three teeth. Legs pale brown. TmI 0.24. Chaetotaxy as in ♂. Abdomen: 1.13 long, 0.70 wide, dark grey. Epigyne and vulva as in Figs. 47-49.



Figs. 43-46. *Leptyphantes cinereus* n. sp.; ♂ paratype. — 43) right palp; 44) paracymbium; 45) lamella characteristica; 46) embolus.



Figs. 47-49. *Leptyphantes cinereus* n. sp.; ♀ paratype. — 47-48) epigyne; 49) vulva.

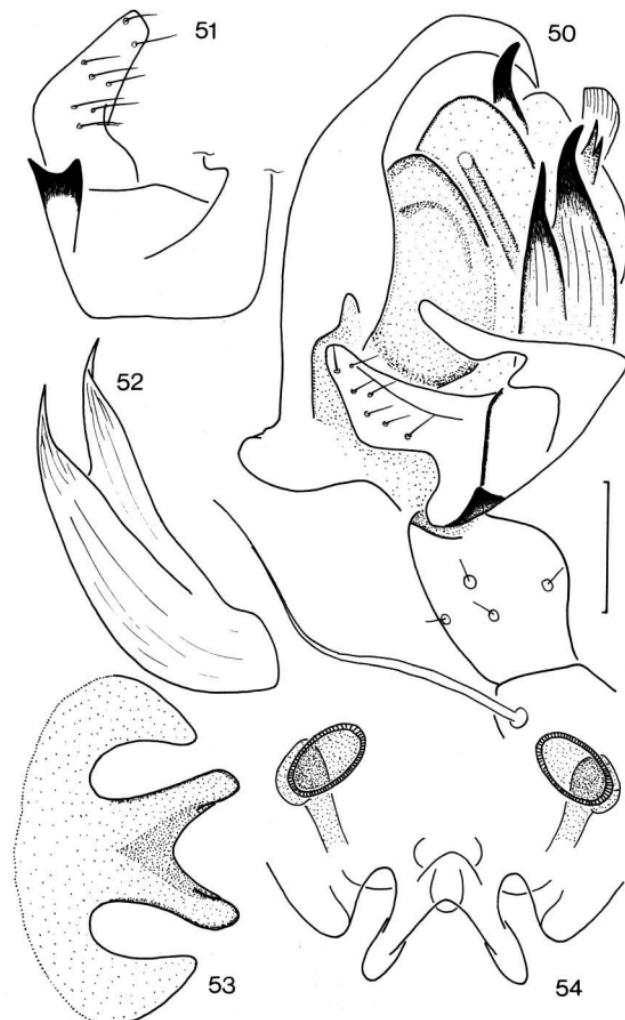
*Leptyphantes supremus* n. sp.

Figs. 50-54.

**Holotype:** ♂ (ZIL), USSR, Kirghizia, C-Tien-Shang, S slope of Terskey-Alatau Mt. Ridge, near Sary-Djaz River, 3200 m, Bolshoy Berkut Valley, 19.VII. 1983, leg. S. Ov-CHINNIKOV.

**Paratypes:** ♂ 2 ♀ (ZIL), ♂♀ (SMF 32159), same locality and date as holotype.

**Diagnosis:** By the form of the epigyne this species is related to *expunctus* (O. PICKARD-CAMBRIDGE 1875), but distinguishable by a larger notch of the scapus. By the shape of the lamella characteristic it is similar to *handschini* SCHENKEL 1919, but differs in the absence of a membrane between the lower and upper branches. This species is characterized by the seta bent at midlength on the palpal tibia, form of the proximal cymbial projection, structural details of both paracymbium and lamella characteristic, as well as by the epigyne.



Figs. 50-54. *Leptyphantes supremus* n. sp.; ♂, ♀ paratypes. — 50) right palp; 51) paracymbium; 52) lamella characteristic; 53) epigyne; 54) vulva.

**Description:** ♂: Total length 2.30. Carapace: 1.05 long, 0.75 wide, brownish-yellow. PME separated by their 2/3 D. Sternum: 0.60 long/wide, grey-brown. Chelicerae: 0.50 long, anterior margin with two teeth. Legs yellow. Tibiae I-IV with two dorsal spines. Tibia I with one pro-, one retrolateral and three ventral spines, tibia II with one retrolateral and two ventral spines. Tibiae III-IV with one ventral spine. All metatarsi with one dorsal spine. TmI 0.19.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	1.45	1.80	1.40	0.95	5.60
	♀	1.25	1.60	1.20	0.75	4.80
II	♂	1.30	1.55	1.25	0.80	4.90
	♀	1.20	1.40	1.10	0.70	4.40
III	♂	1.05	1.23	1.05	0.60	3.93
	♀	1.10	1.18	0.80	0.55	3.63
IV	♂	1.45	1.70	1.40	0.85	5.40
	♀	1.25	1.55	1.20	0.75	4.75

**Palp** (Figs. 50-52): Tibia with a seta bent at midlength. Cymbium with a proximal rounded projection. Lamella characteristic distally with a deep notch. Abdomen: 1.30 long, 0.65 wide, pale brown, at hind third with a vague pattern of dark grey and white interrupted stripes.

♀: Total length 2.70. Carapace 1.20 long, 0.80 wide, greyish-yellow. PME separated by their R. Sternum: 0.65 long, 0.55 wide, grey-brown. Chelicerae: 0.52 long, anterior margin with three teeth. Legs pale brown. TmI 0.21. Chaetotaxy as in male. Abdomen: 1.70 long, 1.10 wide, dark grey, dorsally with a vague pattern of pale stripes and spots. Epigyne and vulva as in Figs. 53-54.

### *Leptyphantes altus* n. sp.

Figs. 55-61.

**Holotype:** ♂ (ZIL), USSR, Kirghizia, N-Tien-Shang, near Frunze, Chuyskaya Valley, *Caragana* litter, 20. V. 1979, leg. S. ZONSTEIN.

**Paratypes:** ♀ (ZIL), same locality and date as holotype. — ♂ 2 ♀ (SMF 32160), ♂ 2 ♀ (ZMMU), 2 ♀ (ZIL), Kazakhstan, N-Tien-Shang, N slope of Zailiysky-Alatau Mt. Ridge, Alma-Ata State Reserve, 1800 m, *Picea* litter, 1. IX. 1983, leg. YU. MARUSIK.

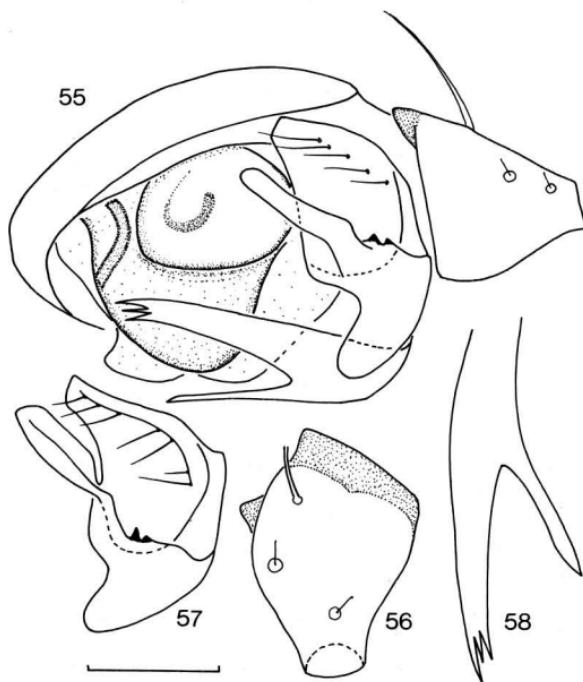
**Diagnosis:** This species belongs to the *pallidus*-group and is characterized by the structure of the palpal tibia, form of both paracymbium and lamella characteristic.

**Description:** ♂: Total length 1.83. Carapace: 0.95 long, 0.75 wide, yellowish-brown, with a narrow darker margin. PME separated by their D. Sternum: 0.45 long/wide, black. Chelicerae: 0.40 long, anterior margin with a large tooth and two smaller teeth flanking former. Legs pale brown. Tibiae I-IV with two dorsal spines, tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III with one dorsal spine. TmI 0.20.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	0.85	1.10	0.78	0.55	3.28
	♀	0.80	1.00	0.70	0.50	3.00
II	♂	0.78	0.95	0.70	0.50	2.93
	♀	0.75	0.90	0.63	0.45	2.73
III	♂	0.65	0.80	0.63	0.40	2.48
	♀	0.70	0.78	0.56	0.36	2.40
IV	♂	0.88	1.18	0.82	0.58	3.46
	♀	0.90	1.12	0.80	0.56	3.38

Palp (Figs. 55-58): Tibia apically with a flat ridge. Paracymbium parabasally with a large keel. Lamella characteristic deeply bipartite, upper branch somewhat longer and wider, with three apical teeth. Abdomen: 0.95 long, 0.65 wide, black.

♀: Total length 1.80. Carapace: 0.85 long, 0.63 wide, coloration as in male. PME separated by their D. Sternum: 0.38 long/wide, black. Chelicerae: 0.38 long, anterior margin with three teeth. Legs pale brown. TmI 0.22. Chaetotaxy as in ♂. Abdomen: 1.55 long, 0.95 wide, black. Epigyne and vulva as in Figs. 59-61.

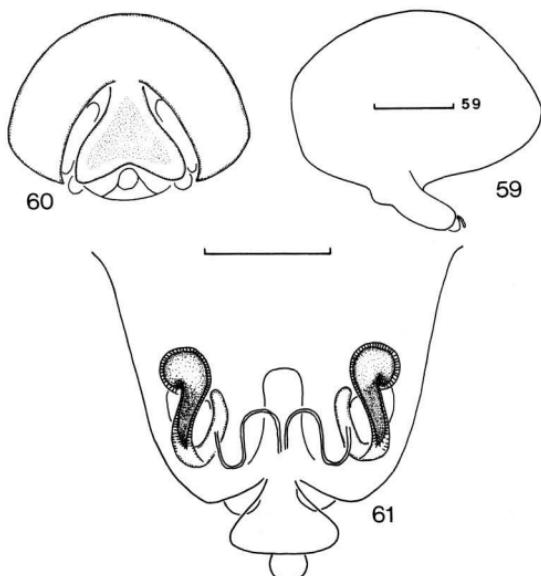


Figs. 55-58. *Leptyphantes altus* n. sp.; ♂ paratype. — 55) left palp; 56) palpal tibia (dorsal view); 57) paracymbium; 58) lamella characteristic.

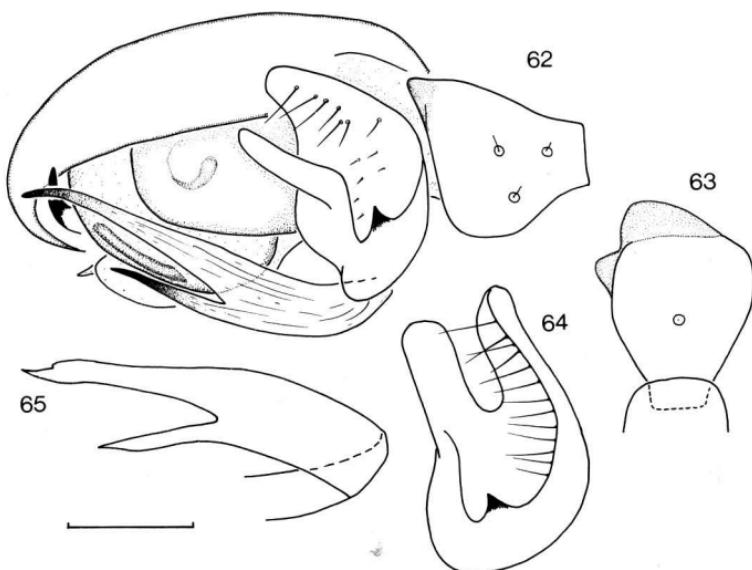
### *Leptyphantes solivagus* n. sp.

Figs. 62-65.

Holotype: ♂ (ZIL), USSR, Kirghizia, N-Tien-Shang, Kungey Alatau Mt. Ridge, Chon-Uryuk-Ty Valley, 2000 m, *Picea* forest, near river, 8. IX. 1983, leg. A. RYVKIN.



Figs. 59-61. *Leptyphantes altus* n. sp.; ♀ paratype. — 59) abdomen (lateral view, scale = 0.5 mm); 60) epigyne; 61) vulva.



Figs. 62-65. *Leptyphantes solivagus* n. sp.; ♂ holotype. — 62) left palp; 63) palpal tibia (dorsal view); 64) paracymbium; 65) lamella characteristicia.

**Diagnosis:** This species is closely related to *altus* n. sp., but is distinguishable by the form of the paracymbium, the longer lamella characteristic and lack of teeth at the apex of its upper branch.

**Description:** ♂ (♀ unknown): Total length 1.80. Carapace: 0.88 long, 0.70 wide, pale brown. PME separated by their R. Sternum: 0.45 long, 0.50 wide, dark grey. Chelicerae: 0.40 long, anterior margin with three teeth. Legs pale brown. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III with one dorsal spine. TmI 0.22.

Legs:	Fe	Pt+Ti	Mt	Ta	Total
I	0.83	1.03	0.73	0.53	3.12
II	0.75	0.93	0.68	0.50	2.86
III	0.70	0.78	0.55	0.40	2.43
IV	0.85	1.10	0.80	0.53	3.28

**Palp** (Figs. 62-65): Tibia apically with a flat ridge. Lamella characteristic deeply bipartite, upper branch somewhat longer and wider, apically pointed. Abdomen: 1.00 long, 0.65 wide, dark grey.

### *Lepthyphantes sacer* n. sp.

Figs. 66-71.

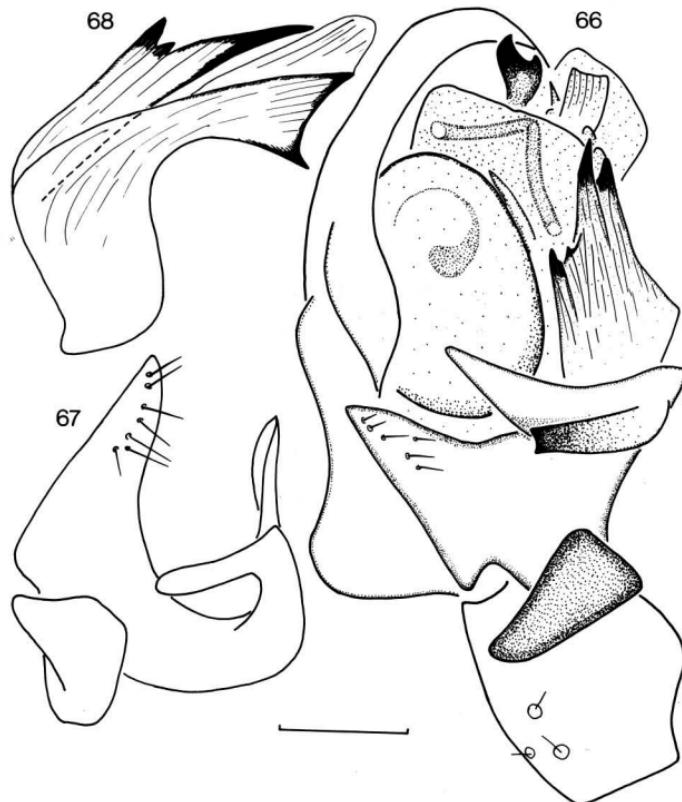
**Holotype:** ♂ (ZIL), USSR, Kirghizia, N-Tien-Shang, N slope of Kirghizsky Mt. Ridge, Kara-Balta Valley, near Tyuya-Ashu Pass, 3000 m, subalpine meadow, 12. VI. 1983, leg. S. ZONSTEIN & S. OVCHINNIKOV.

**Paratypes:** ♂♀ (ZIL), ♂ (SMF 32161), C-Tien-Shang, S slope of Terskey-Alatau Mt. Ridge, Sary-Djaz River Valley, Bolshoy Berkut, 3200 m, 19. VII. 1983, leg. S. OVCHINNIKOV.

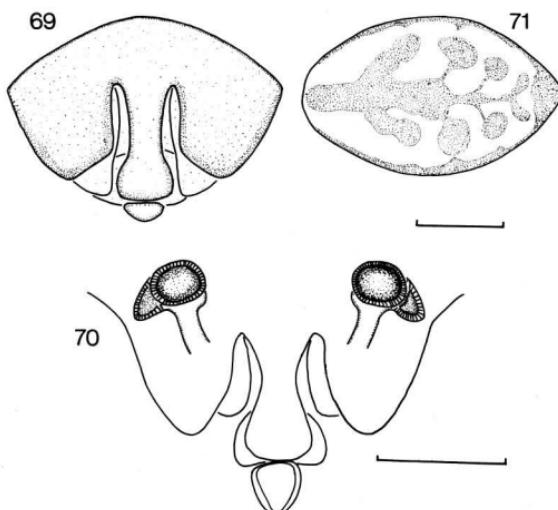
**Diagnosis:** This species is characterized by the shape of paracymbium, lamella characteristic and epigyne.

**Description:** ♂: Total length 2.55. Carapace: 1.20 long, 1.00 wide, brownish-yellow. PME separated by their D. Sternum: 0.65 long/wide, dark grey. Chelicerae: 0.50 long, anterior margin with two teeth. Legs pale brown, tibiae and femora with a dark median band. Tibiae I-IV with two dorsal spines. Tibia I with one pro-, one retrolateral and two ventral spines; tibia II with one retrolateral and one ventral spine; tibiae III-IV with one ventral spine. All metatarsi with one dorsal spine. TmI 0.19.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	1.40	1.70	1.30	0.85	5.25
	♀	1.25	1.60	1.15	0.80	4.80
II	♂	1.15	1.40	1.15	0.85	4.55
	♀	1.15	1.35	1.00	0.70	4.20
III	♂	1.05	1.05	0.85	0.60	3.55
	♀	0.95	1.08	0.85	0.65	3.53
IV	♂	1.30	1.50	1.25	0.75	4.80
	♀	1.25	1.55	1.20	0.75	4.75



Figs. 66-68. *Leptyphantes sacer* n. sp.; ♂ paratype. — 66) right palp; 67) paracymbium; 68) lamella characteristicia.



Figs. 69-71. *Leptyphantes sacer* n. sp.; ♀ paratype. — 69) epigyne; 70) vulva; 71) abdomen (dorsal view, scale = 0.5 mm).

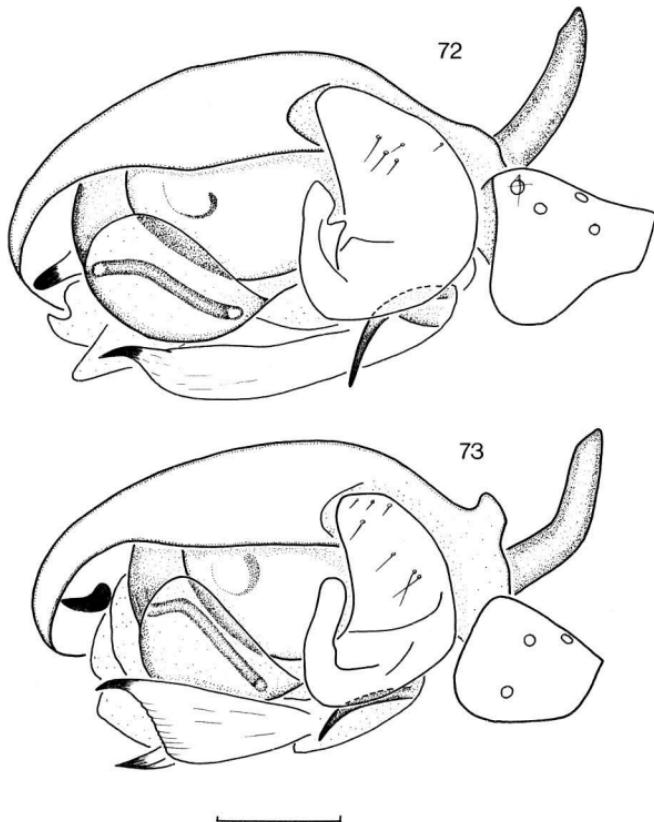
Palp (Figs. 66-68): Cymbium proximally with a broad rounded projection. Paracymbium with a large dark apophysis. Lamella characteristic divided into two broad lobes. Abdomen: 1.55 long, 1.00 wide, dorsal pattern as in Fig. 71.

♀: Total length 2.45. Carapace: 1.05 long, 0.85 wide, dark brown. PME separated by their D. Sternum: 0.65 long, 0.55 wide, dark brown. Chelicerae: 0.45 long, anterior margin with three teeth. Leg pattern as in ♂. TMI 0.22. Chaetotaxy as in ♂. Abdomen: 1.60 long, 1.05 wide, dorsal pattern as in Fig. 71. Epigyne and vulva as in Figs. 69-70.

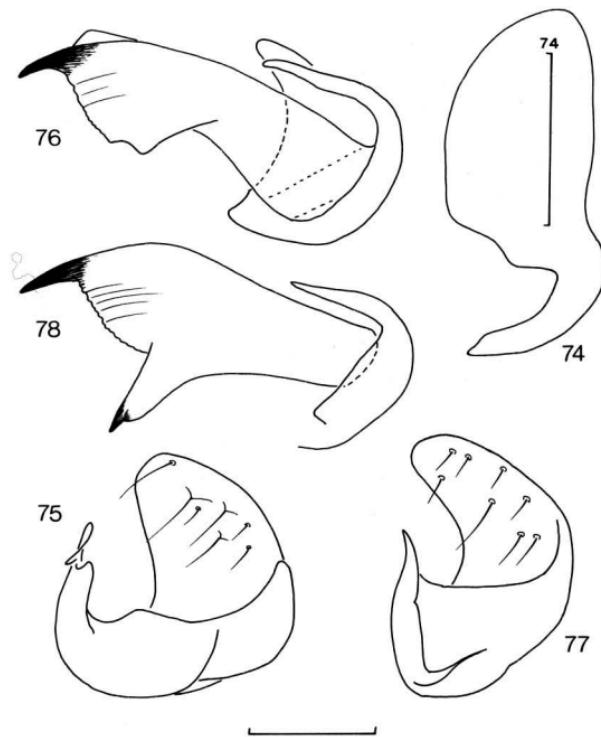
*Leptyphantes rupeus* n. sp.

Figs. 72, 74-76.

Holotype: ♂ (ZIL), USSR, Kazakhstan, N-Tien-Shang, Chu-Ili Mts., near Kurday Pass, 1000 m, 17. IV. 1983, leg. S. OVCHINNIKOV & S. ZONSTEIN.



Figs. 72-73. Left palp, ♂. — 72) *Leptyphantes rupeus* n. sp. (holotype). — 73) *tchatkalensis* TANASEVITCH 1983.



Figs. 74-78. *Leptyphantes rupeus* n. sp. ( $\sigma$  holotype, 74-76) and *tchatkalensis* TANASEVITCH 1983 ( $\sigma$ , 77-78). — 74) cymbium (caudal view, scale = 0.5 mm); 75, 77) paracymbium; 76, 78) lamella characteristicia.

**Diagnosis:** This species seems especially closely related to *tchatkalensis* TANASEVITCH 1983 recently described from the W-Tien-Shang Mts., but is distinguishable by the poorer bent proximal cymbial apophysis lacking a tubercle at its base, different shape of paracymbium, as well as by the absence of a lower pointed apophysis at the apical end of the lamella characteristicia (Figs. 72-78).

**Description:**  $\sigma$  ( $\varphi$  unknown): Total length 2.08. Carapace: 1.00 long, 0.75 wide, dark brown. PME separated by their R. Sternum: 0.48 long, 0.50 wide, black-brown. Chelicerae: 0.33 long, anterior margin with three teeth. Legs yellow. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. All metatarsi with one dorsal spine. TmI 0.23.

Legs:	Fe	Pt+Ti	Mt	Ta	Total
I	1.15	1.38	1.08	0.75	4.36
II	1.05	1.23	1.00	0.63	3.91
III	0.85	0.93	0.80	0.50	3.08
IV	1.10	1.28	1.03	0.60	4.01

**Palp (Figs. 72, 74-76):** Cymbium proximally with a long and very gently curved apophysis. Paracymbium toothless. Radix at base of lamella characteristicia with a slender long apophysis. Abdomen: 1.15 long, 0.75 wide, black, with two oblong white spots on anterior half.

*Leptyphantes sibiricus* n. sp.

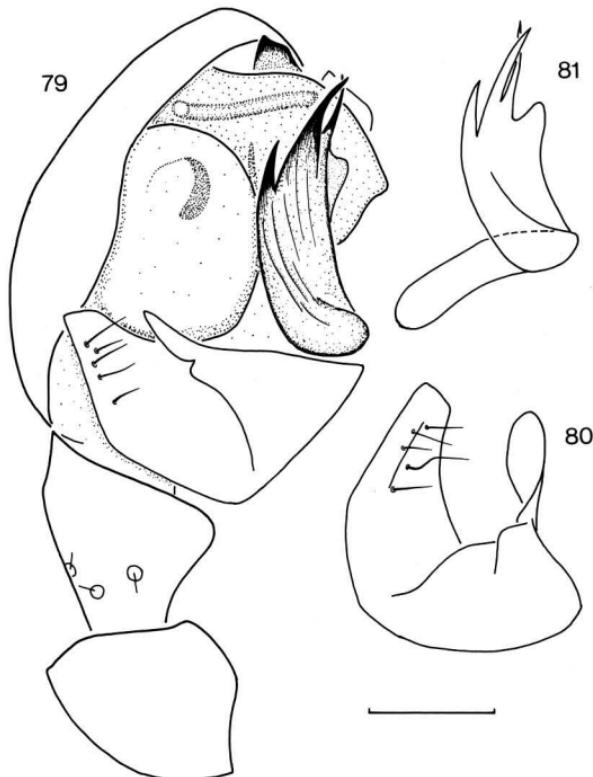
Figs. 79-84.

**Holotype:** ♂ (ZIL), USSR, Siberia, Yenissei River, Mirnoye ( $62^{\circ}20'N$ ), Sphagnum bog with depressed *Picea*, *Larix*, *Pinus sibiricus*, along stream, 10.-13.VIII. 1979, leg. K. ESKOV.

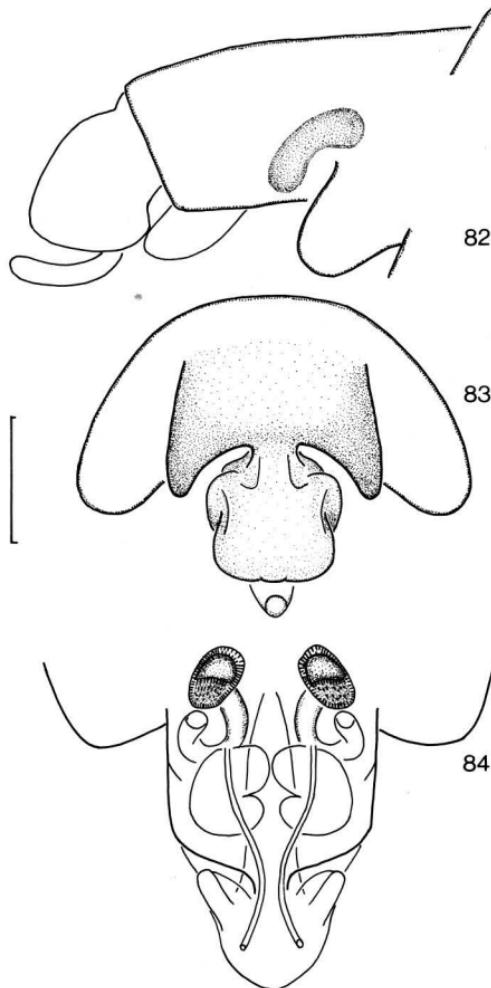
**Paratypes:** 2 ♀ (SMF 32162), same locality and dates as holotype. — 3 ♀ (ZIL), 3 ♀ (ZMMU), Krasnoyarsk, Stolby State Reserve, swampy *Picea* forest, litter, 10. VI. 1980, leg. K. ESKOV.

**Diagnosis:** This species seems to be especially closely related to *complicatus* (EMERTON 1882), but is distinguishable by the lack of teeth on the paracymbium, presence of sharp apophyses on the lamella characteristic, well projecting scapus of the epigyne.

**Description:** ♂: Total length 2.00. Carapace: 0.98 long, 0.75 wide, pale brown. PME separated by their 2/3 D. Sternum: 0.53 long/wide, pale brown. Chelicerae: 0.40 long, anterior margin with three teeth. Legs yellowish-brown. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III with one dorsal spine. TmI 0.14.



Figs. 79-81. *Leptyphantes sibiricus* n. sp.; ♂ paratype. — 79) right palp; 80) paracymbium; 81) lamella characteristic.



Figs. 82-84. *Lepthyphantes sibiricus* n. sp.; ♀ paratype. — 82-83) epigyne; 84) vulva.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	0.95	1.20	0.88	0.63	3.66
	♀	0.80	0.98	0.67	0.55	3.00
II	♂	0.90	1.08	0.80	0.55	3.33
	♀	0.75	0.86	0.63	0.50	2.74
III	♂	0.78	0.83	0.65	0.48	2.74
	♀	0.65	0.70	0.55	0.43	2.33
IV	♂	1.00	1.23	0.90	0.58	3.71
	♀	0.88	1.03	0.75	0.55	3.21

Palp (Figs. 79-81): Cymbium without proximal outgrowth. Paracymbium lacks teeth. Lamella characteristica distally with three sharp apophyses. Abdomen: 1.05 long, 0.75 wide, dark grey.

♀: Total length 1·95. Carapace: 0·78 long, 0·63 wide, pale brown. PME separated by their 2/3 D. Sternum: 0·45 long/wide, dark grey. Chelicerae: 0·30 long, anterior margin with three teeth. TmI 0·22. Chaetotaxy as in ♂. Abdomen: 1·20 long, 0·78 wide, grey. Epigyne and vulva as in Figs. 82-84.

### *Leptyphantes flexilis* n. sp.

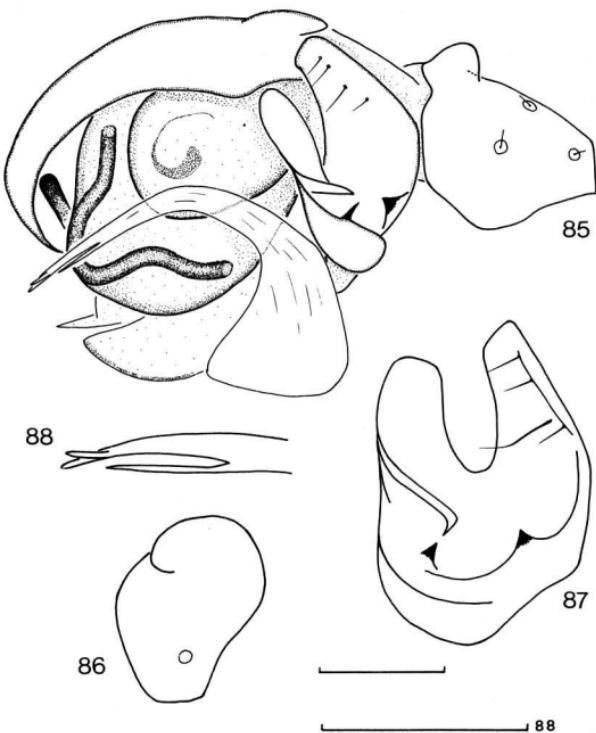
Figs. 85-88.

Holotype: ♂ (ZIL), USSR, Siberia, Yenisey River, Mirnoye ( $62^{\circ}20'N$ ), near Varlamovka River, taiga, litter, 28. VIII.—2. IX. 1979, leg. K. ESKOV.

Paratype: ♂ (SMF 32163), same locality and dates as holotype.

**Diagnosis:** This species is characterized by the presence of a dorsal knob on the palpal tibia and form of the lamella characteristica reminding, to a certain extent, of that of *notabilis* KULCZINSKI 1887. The paracymbium is very similar to that of *complicatus* (EMERTON 1882).

**Description:** ♂ (♀ unknown): Total length 1·83. Carapace: 0·78 long, 0·63 wide, brownish-yellow. PME separated by their D. Sternum: 0·45 long, 0·48 wide, grey. Chelicerae: 0·35 long, anterior margin with three teeth. Legs brownish-yellow. Tibia I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III with one dorsal spine. TmI 0·23.



Figs. 85-88. *Leptyphantes flexilis* n. sp.; ♂ paratype. — 85) left palp; 86) palpal tibia (dorsal view); 87) paracymbium; 88) apex of lamella characteristica (scale = 0·1 mm).

Legs:	Fe	Pt+Ti	Mt	Ta	Total
I	0.85	1.10	0.75	0.60	3.30
II	0.78	1.00	0.65	0.53	2.96
III	0.68	0.91	0.58	0.43	2.60
IV	0.93	1.15	0.80	0.55	3.43

Palp (Figs. 85-88): Tibia with a dorsal apical knob. Paracymbium with two teeth. Lamella characteristic as a long, thin, narrow, curved ribbon. Abdomen: 1.00 long, 0.60 wide, grey.

### *Leptyphantes distichus* n. sp.

Figs. 89-94.

Holotype: ♂ (ZIL), USSR, Siberia, Krasnoyarsk, Stolby State Reserve, Laletina spring, leaf under *Salix* and *Alnus fruticosa*, 24. V. 1980, leg. K. ESKOV.

Paratypes: ♂ (SMF 32164), ♀ (ZIL), same locality and date as holotype.

**Diagnosis:** This species is characterized by the peculiar leg chaetotaxy, shape of both cymbium and lamella characteristic. The epigyne is similar to that of *complicatus* (EMERTON 1882), *sibiricus* n. sp. and *japonicus* OI 1960, but still well distinguishable in frontal view.

**Description:** ♂: Total length 2.75. Carapace: 1.25 long, 0.90 wide, pale brown. PME separated by their D. Sternum: 0.65 long/wide, dark brown. Chelicerae: 0.45 long, anterior margin with two teeth. Legs pale brown. Tibiae I-IV with two dorsal, one pro- and one retrolateral spine. Tibiae I-II with two ventral, tibia III-IV with one ventral spine. Metatarsi I-III with one dorsal spine, metatarsus IV with one dorsal and one ventral spine. TmI 0.21.

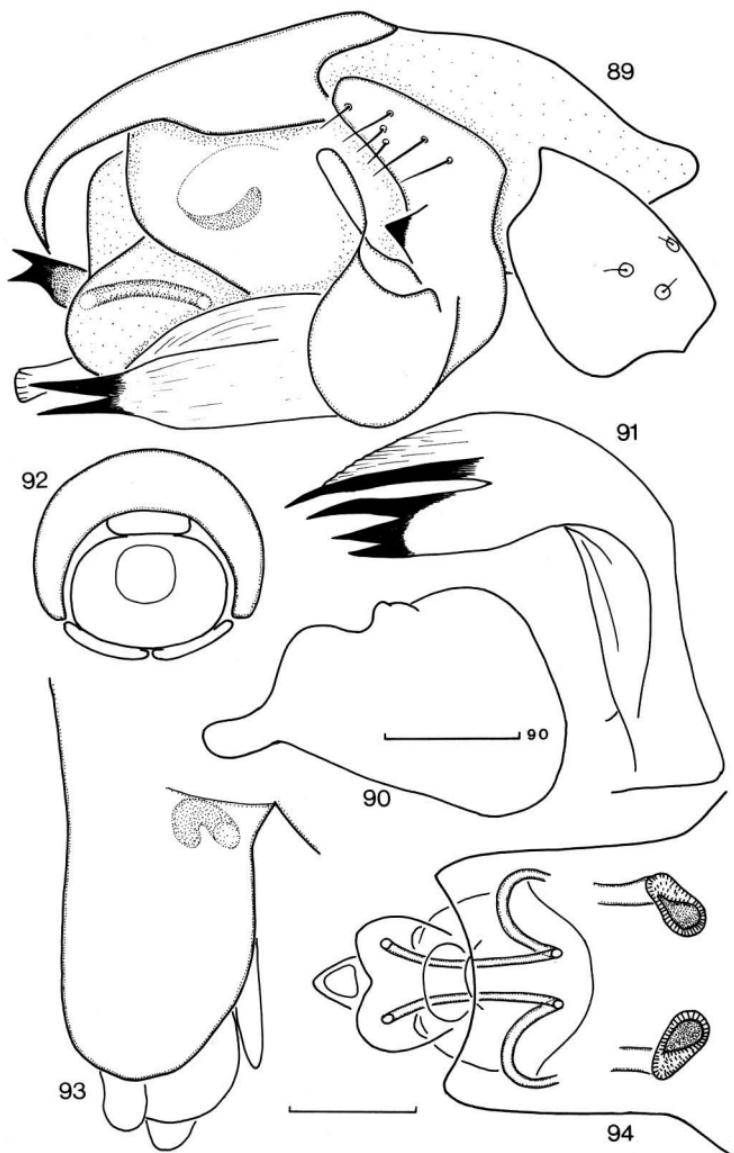
Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	1.45	2.00	1.70	0.95	5.50
	♀	1.40	1.70	1.30	0.85	5.25
II	♂	1.40	1.65	1.45	0.80	5.30
	♀	1.35	1.45	1.15	0.75	4.70
III	♂	1.15	1.35	1.15	0.70	4.35
	♀	1.00	1.13	0.95	0.65	3.73
IV	♂	1.50	1.80	1.50	0.85	5.65
	♀	1.40	1.55	1.25	0.70	4.90

Palp (Figs. 89-91): Cymbium proximally with a broad subconical projection rounded at apex. Paracymbium with a good tooth. Suprategular apophysis bifid. Lamella characteristic with four good apical teeth. Abdomen: 1.70 long, 0.85 wide, dorsal pattern well variable.

♀: Total length 2.75. Carapace: 1.00 long, 0.85 wide, brown. PME separated by their D. Sternum: 0.65 long, 0.55 wide, black-brown. Chelicerae: 0.50 long, anterior margin with three teeth. Legs pale brown. TmI 0.27. Chaetotaxy as in ♂. Abdomen: 1.70 long, 1.20 wide, dorsally pale, with two parallel rows of black spots. Epigyne and vulva as in Figs. 92-94.

*Leptyphantes vittatus* SPASSKY 1941.

Figs. 95-99.

1941 *Leptyphantes vittatus* SPASSKY, Folia Zool. Hydrobiol., 17 (1): 21, figs. (♀).1945 *Leptyphantes vittatus*, — SPASSKY & LUPOVA, Rev. Ent. URSS, 28 (1-2): 48, (♀).Material: ♂♀ (ZIL), USSR, Kirghizia, W-Tien-Shang, Baubashata Mt. Ridge, near Arslanbob, 1400 m, *Juglans regia* forest, litter, 7. X. 1982, leg. S. ZONSTEIN.

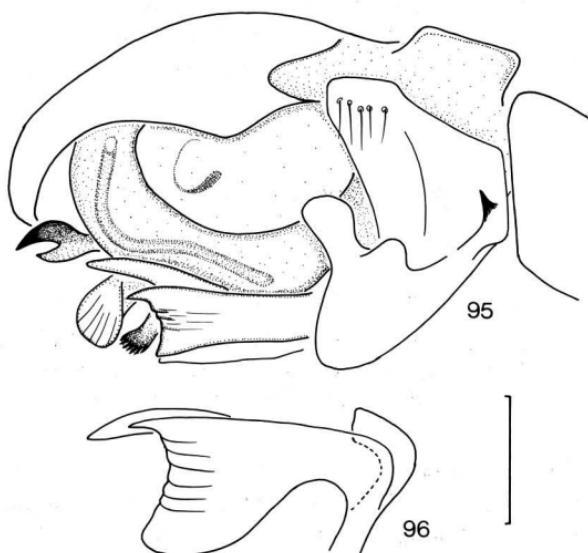
Figs. 89-94. *Leptyphantes distichus* n.sp.; ♂, ♀ paratypes. — 89) left palp; 90) cymbium (caudal view, scale = 0.2 mm); 91) lamella characteristic; 92-93) epigyne; 94) vulva.

**Description:** ♂: Total length 2.90. Carapace: 1.70 long, 0.95 wide, brownish-yellow, with a wide dark medial stripe bifurcate at anterior half and dark margin. PME separated by their D. Sternum: 0.70 long, 0.65 wide, dark grey. Chelicerae: 0.60 long, anterior margin with two teeth. Legs yellowish-brown, with numerous dark bands. Coxae apically with a dark ventral stripe. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III (IV — ?) with one dorsal spine. TmI 0.21.

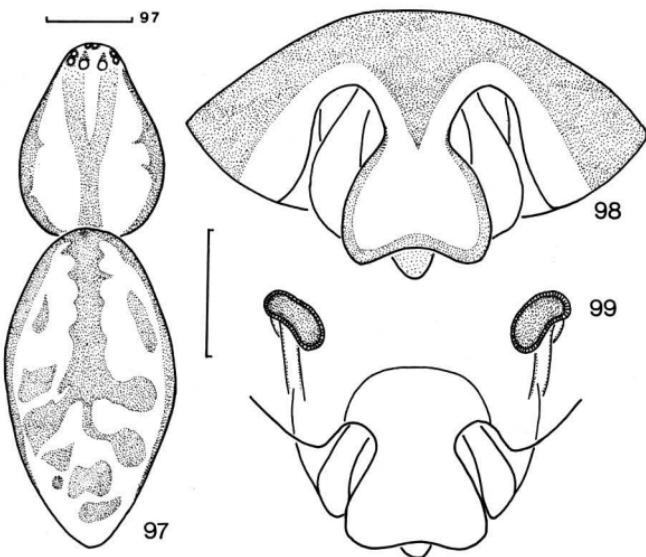
Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	1.75	2.05	1.65	1.00	6.45
	♀	1.60	1.90	1.45	0.95	5.90
II	♂	1.50	1.70	1.35	0.85	5.40
	♀	1.40	1.60	1.20	0.80	5.00
III	♂	1.20	1.25	1.00	0.60	4.05
	♀	1.10	1.25	0.95	0.65	3.95
IV	♂	1.60	?	?	?	?
	♀	1.58	?	?	?	?

**Palp (Figs. 95-96):** Tibia with a stout seta. Cymbium with a small proximal keel. Lamella characteristic narrow at base, abruptly widening toward end. Abdomen: 1.75 long, 1.00 wide, dorsal pattern as in Fig. 97.

♀: Total length 2.90. Carapace: 1.30 long, 0.90 wide, dorsal pattern as in Fig. 97. PME separated by their D. Sternum: 0.65 long, 0.60 wide, dark grey. Chelicerae: 0.55 long, anterior margin with three teeth. Leg pattern and chaetotaxy as in ♂. Abdomen: 1.70 long, 1.15 wide, dorsal pattern as in Fig. 97. Epigyne and vulva as in Figs. 98-99.



Figs. 95-96. *Leptyphantes vittatus* SPASSKY 1941; ♂. — 95) left palp; 96) lamella characteristic.



Figs. 97-99. *Lepthyphantes vittatus* SPASSKY 1941; ♀. — 97) habitus (dorsal view, scale = 0.5 mm); 98) epigyne; 99) vulva.

**Remarks:** SPASSKY (1941) had described *vittatus* but by a single ♀ from Tadzhikistan (Stalinabad, nowadays Dushanbe). Later, SPASSKY & LUPOVA (1945) redescribed *vittatus* again as a new species! However, it is obvious that, due to priority, SPASSKY should be regarded as the sole author of this species, and the year of validization must be considered 1941. Unfortunately, the holotype of *vittatus* seems to be lost, but SPASSKY's (1941) original illustrations leave little doubt that the above material from Arslanbob, Kirghizia, is conspecific to *vittatus*. This is the first description of its ♂.

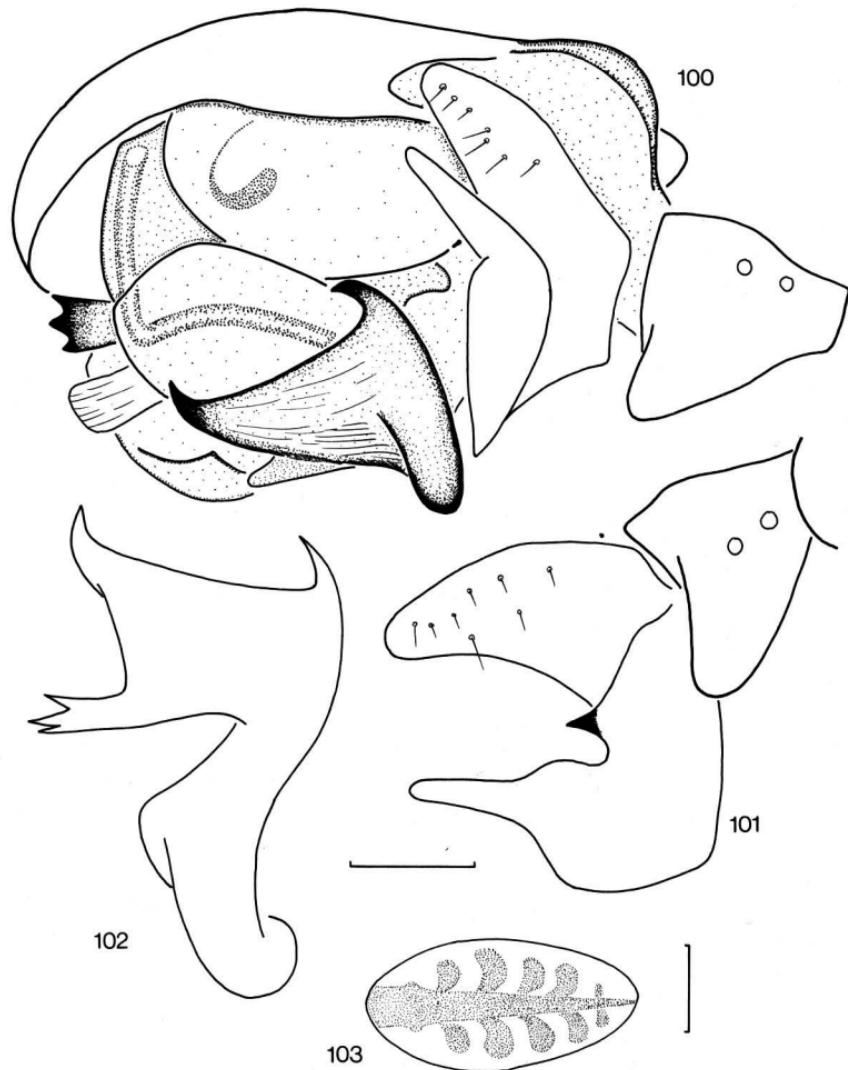
### *Lepthyphantes luteipes* (L. KOCH 1879).

Figs. 100-103.

1879 *Linyphia luteipes* L. KOCH, K. Svensk. Vet. Akad. handl., 16 (5): 21, figs. (♀).  
1973 *Lepthyphantes luteipes*, — HOLM, Zool. Scr., 2: 93, figs. (♀).

**Material:** ♂ 3 ♀ (ZIL), USSR, Siberia, Yenisey River, near Podkamennaya Tunguska, bank of Yenisey, 25. VI. 1979, leg. K. ESKOV, — ♀ (SMF 32165), Kazakhstan, 30 km S Ust-Kamenogorsk, Gornaya Ulbinka, *Abies sibirica* forest, litter, 27. VII. 1983, leg. S. GOLOVATCH.

**Description:** ♂: Total length 2.75. Carapace: 1.25 long, 0.95 wide, brown, with a narrow darker margin. PME separated by their D. Sternum: 0.65 long/wide, dark grey. Chelicerae: 0.55 long, anterior margin with two teeth. Legs pale brown. Tibiae I-III (IV — ?) with two dorsal, one pro- and one retrolateral spine. Tibia I-II with two ventral, tibia III with one ventral spine. Metatarsi I-III (IV — ?) with one dorsal and one ventral spine. TmI 0.23.



Figs. 100-103. *Leptophantes luteipes* (L. KOCH 1879); ♂, ♀. — 100) left palp; 101) palpal tibia and paracymbium; 102) lamella characteristic; 103) abdomen (dorsal view, scale = 0.5 mm).

Legs:	Fe	Pt+Ti	Mt	Ta	Total
I	1.75	2.10	1.75	1.10	6.70
II	1.50	1.75	1.50	0.90	5.65
III	1.10	1.25	1.10	0.70	4.15
IV	1.55	?	?	?	?

Palp (Figs. 100-102): Tibia with a ventro-lateral conical tubercle. Paracymbium with one tooth. Lamella characteristic well sclerotized. Abdomen: 1.60 long, 0.80 wide, dorsal pattern as in Fig. 103.

**Remarks:** This species was described but by two ♀♀ (KOCH 1879) from Siberia and redescribed by HOLM (1973) from the lectotype. The above is the first description of the ♂ of *luteipes*.

***Leptyphantes cerinus* (L. KOCH 1879).**

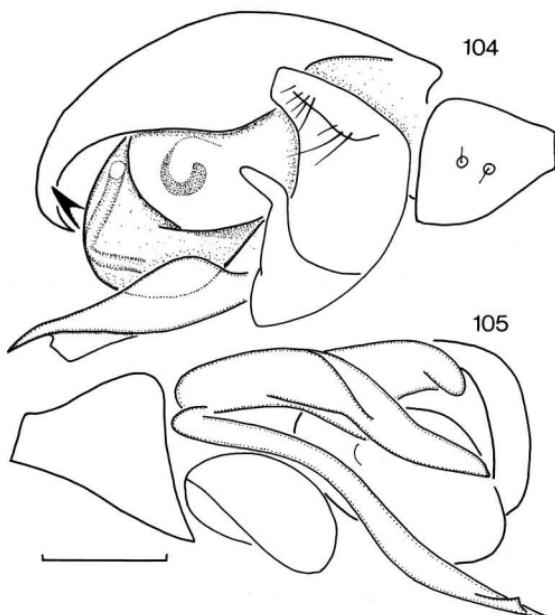
Figs. 104-107.

1879 *Linyphia cerina* L. KOCH, K. svenska Vet. Akad. Handl., 16 (5): 30, figs. (♀).  
1973 *Leptyphantes cerinus*, — HOLM, Zool. Scr., 2: 92, figs. (♀).

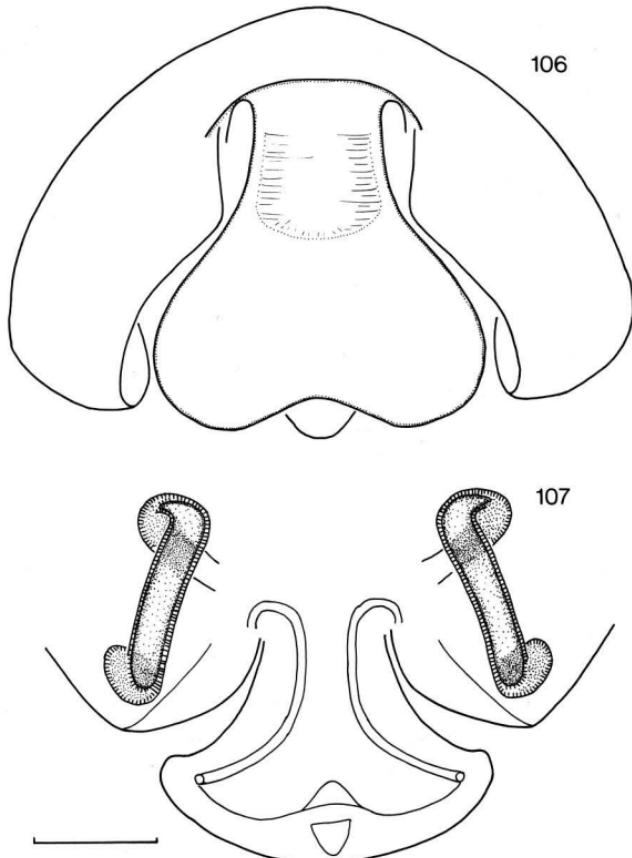
**Material:** 2 ♂ (ZIL), Siberia, Krasnoyarsk, Stolby State Reserve, *Abies sibirica* forest, litter, 1. VI. 1980; leg. K. ESKOV. — 2 ♂ 2 ♀ (SMF 32166), Kazakhstan, 30 km S Ust-Kamenogorsk, near Gornaya Ulbinka, *Abies sibirica* forest, litter, 23.-24. VI. 1983; leg. S. GOLOVATCH. — 2 ♂ 1 ♀ (ZMMU), ♀ (ZIL), 30 km N Ust-Kamenogorsk, right bank of Irtysh River, ravine with *Salix*, *Populus*, *Oleaster* bush, litter, 24. VI. 1983; leg. S. GOLOVATCH.

**Description:** ♂: Total length 1.80. Carapace: 0.80 long, 0.58 wide, pale brown. PME separated by their 2/3 D. Sternum: 0.45 long/wide, greyish-brown. Chelicerae: 0.38 long, anterior margin with three teeth. Legs pale brown. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III with one dorsal spine.

Legs:	Fe	Pt+Ti	Mt	Ta	Total
I	0.75	0.98	0.68	0.55	2.96
II	0.70	0.88	0.63	0.50	2.71
III	0.55	0.76	0.53	0.43	2.27
IV	0.75	0.98	0.70	0.50	2.93



Figs. 104-105. Left palp of *Leptyphantes cerinus* (L. KOCH 1879); ♂.



Figs. 106-107. *Leptyphantes cerinus* (L. KOCH 1879); ♀. — 106) epigyne; 107) vulva.

Palp (Figs. 104-105): Paracymbium toothless. Lamella characteristic well deviating from main palpal axis. Abdomen: 1.03 long, 0.63 wide, grey.

♀: Epigyne and vulva as in Figs. 106-107. Base of scapus of epigyne concave, concavity being observable but in lateral view.

**Remarks:** This species was described but by a single ♀ from Siberia (Koch 1879) and subsequently redescribed by Holm (1973). The above is the first description of the ♂ of *cerinus*.

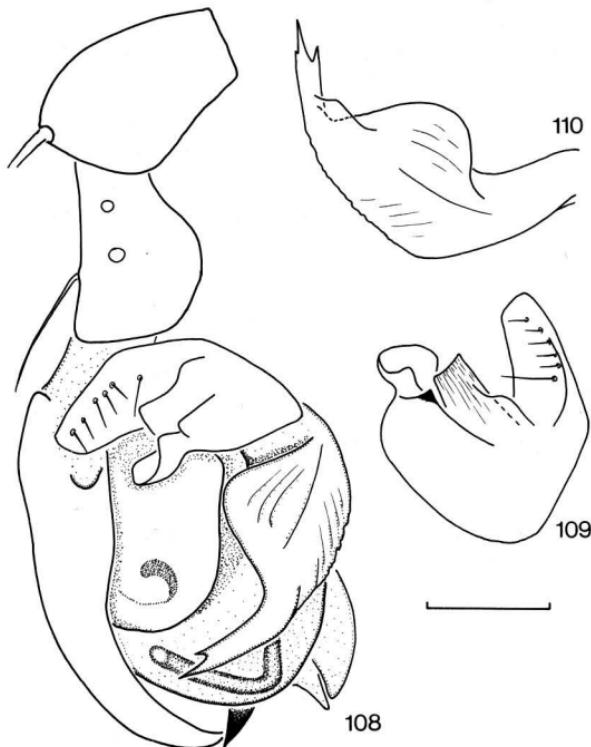
### *Leptyphantes karpinskii* (O. PICKARD-CAMBRIDGE 1873).

Figs. 108-113.

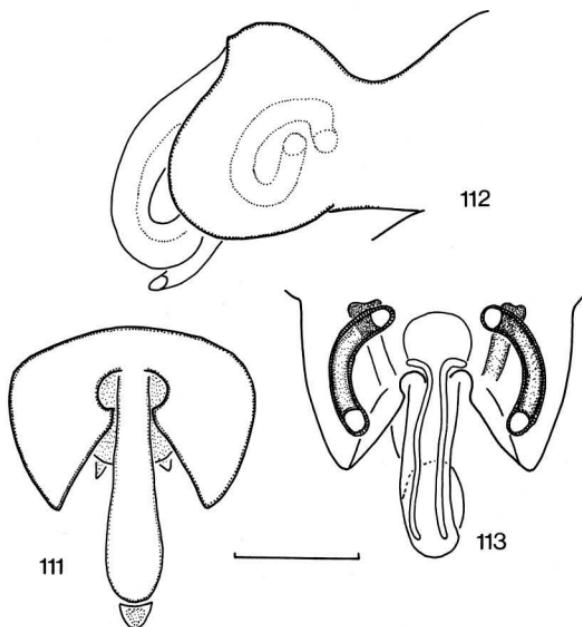
1873 *Linyphia karpinskii* PICKARD-CAMBRIDGE, Proc. zool. Soc. Lond., 1873: 437, figs. (♂♀).

1884 *Leptyphantes karpinskii*, — SIMON, Arachnides de France, 5 (2): 330.

1978 *Leptyphantes karpinskii*, — VAN HELSDINGEN, Zool. Meded., 53 (17): 187.



Figs. 108-110. *Leptyphantes karpinskii* (O. PICKARD-CAMBRIDGE 1873); ♂. — 108) left palp; 109) paracymbium; 110) lamella characteristic.



Figs. 111-113. *Leptyphantes karpinskii* (O. PICKARD-CAMBRIDGE 1873); ♀. — 111-112) epigyne; 113) vulva.

Material: ♂♀ (ZIL), USSR, Khabarovsk Territory, Amur River, 43 km SW of Pashkovo, *Quercus* forest, litter, 21. VI. 1978, leg. S. TOMS.

**Diagnosis:** This species seems especially closely related to *angulipalpis* (WESTRING 1851), but is well distinguishable by the less stout seta on the palpal tibia, structure of the paracymbium, somewhat different shape of the lamella *characteristica*, as well as by the narrower scapus of the epigyne. A similar epigyne is also met with in *angulatus* (O. PICKARD-CAMBRIDGE 1879), *geminus* TANASEVITCH 1982 and some others.

**Description:** ♂: Total length 1.73. Carapace: 0.80 long, 0.65 wide, brown. PME separated by their D. Sternum: 0.50 long/wide, dark grey. Chelicerae: 0.38 long, anterior margin with three teeth. Legs pale brown. Tibiae I-IV with two dorsal spines. Tibia I with one pro- and one retrolateral spine, tibia II with one retrolateral spine. Metatarsi I-III with one dorsal spine. TmI 0.22.

Legs:		Fe	Pt+Ti	Mt	Ta	Total
I	♂	0.88	1.13	0.80	0.58	3.39
	♀	0.84	1.03	0.70	0.53	3.10
II	♂	0.73	1.03	0.73	0.53	3.02
	♀	0.71	?	?	?	?
III	♂	0.70	0.86	0.63	0.45	2.64
	♀	0.68	0.78	0.35	0.40	2.21
IV	♂	0.88	1.20	0.90	0.55	3.53
	♀	0.85	1.03	0.75	0.50	3.13

Palp (Figs. 108-110): Tibia somewhat elongated. Paracymbium toothless, but at midlength with a good ridge-shaped projection. Lamella *characteristica* broad at base, distally narrow, curved upward. Abdomen: 1.00 long, 0.63 wide, grey.

♀: Total length 1.95. Carapace: 0.75 long, 0.63 wide. Sternum: 0.45 long/wide. TmI 0.21. Coloration of carapace, sternum, legs and leg chaetotaxy as in ♂. Abdomen: 1.25 long, 0.75 wide, grey. Epigyne and vulva as in Figs. 111-113.

**Remarks:** Described by ♂ and ♀ from the southern point of Lake Baikal, Siberia (O. PICKARD-CAMBRIDGE 1873), *karpinskii* has since then never been rediscovered.

### Резюме.

Иллюстрированное описание 16 новых видов *Lepthyphantes* MENGE 1866: *contortus* n.sp., *abditus* n.sp. (Кавказ), *spasskyi* n.sp. (побережье Азовского моря, Уральская область, Казахстан), *badhkyzensis* n.sp. (Туркмения), *macer* n.sp., *plumatus* n.sp., *tienschangensis* n.sp., *cinereus* n.sp., *supremus* n.sp., *altus* n.sp., *solivagus* n.sp., *sacer* n.sp., *rupeus* n.sp. (Тянь-Шань), *sibiricus* n.sp., *flexilis* n.sp., *distichus* n.sp. (Сибирь). Впервые описываются ♂♂ и переописываются ♀♀ *vittatus* SPASSKY 1941, *luteipes* (L. KOCH 1879), *cerinus* (L. KOCH 1879). Переописываются ♂ и ♀ *karpinskii* (O. PICKARD-CAMBRIDGE 1873).

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