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New or rare Oriental sac spiders of the genus *Clubiona* Latreille 1804 (Aranei Clubionidae).

Новые или редкие ориентальные пауки-мешкопряды рода *Clubiona* Latreille 1804 (Aranei Clubionidae).

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KEY WORDS: *Clubiona*, taxonomy, new species, new synonyms, Russian Far East, North Korea.
КЛЮЧЕВЫЕ СЛОВА: *Clubiona*, таксономия, новые виды, новые синонимы, Дальний Восток России, Северная Корея.

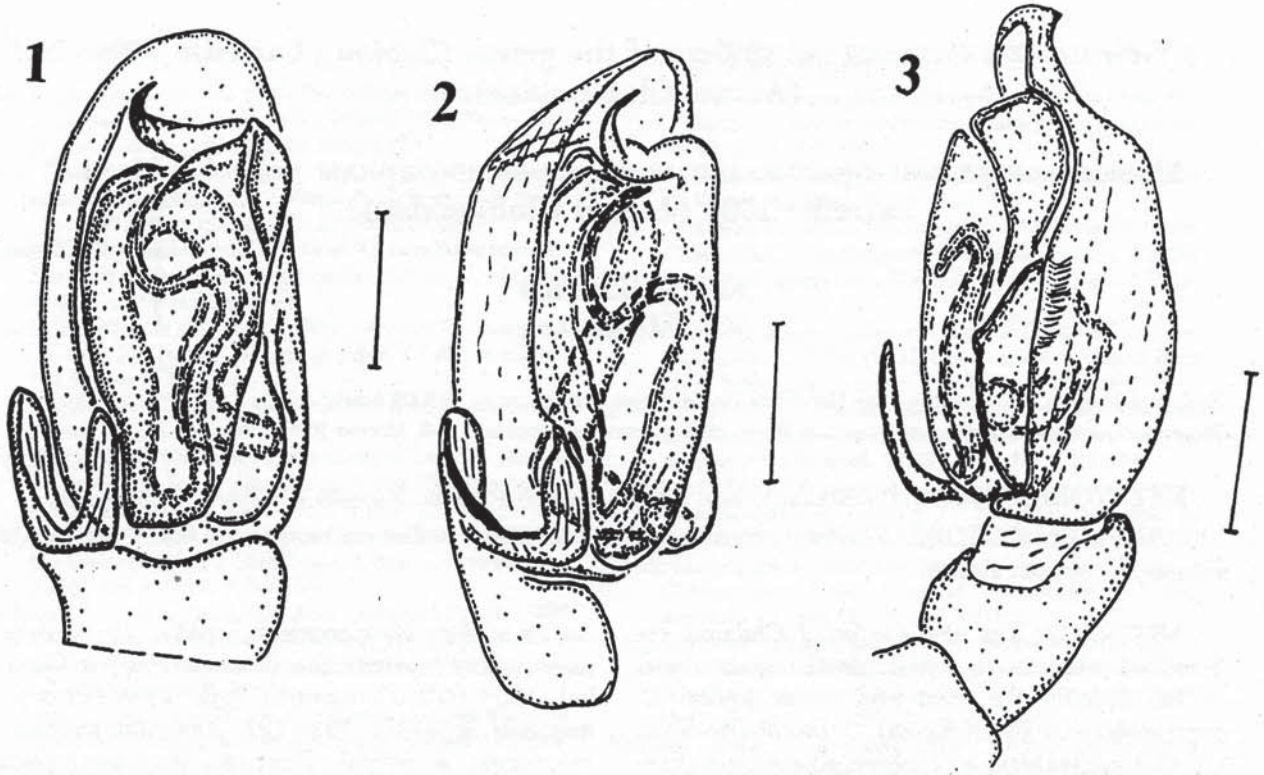
ABSTRACT: Ten new species of *Clubiona* are described as based on material from the southern part of the Russian Far East and North Korea: *C. proszynskii* sp.n. (♂, N-Korea), *C. chechtsirica* sp.n. (♂, Bolshekhekhtsyrsky Reserve, Khabarovsk Province), *C. paralena* sp.n. (♂, N-Korea), *C. kurenshikovi* sp.n. (♀, Bolshekhekhtsyrsky Reserve), *C. nenilini* sp.n. (♀, S-Siberia), *C. eskovi* sp.n. (♀, Maritime Province), *C. orientalis* sp.n. (♀, N-Korea), *C. zyuzini* sp.n. (♀, Maritime Province), *C. oligerae* sp.n. (♂, Maritime Province), and *C. evoronensis* sp.n. (♀, Khabarovsk Province). *C. mandschurica* Schenkel, 1953 (♂), *C. venusta* Paik, 1985 (♀), and *C. hummeli* Schenkel, 1936 (♀) are redescribed upon new samples. Two species are recorded in Russia for the first time. Differences between two closely related species, *C. pseudogermanica* Schenkel, 1936, and *C. mayumiae* Ono, 1993, are confirmed. Three new synonyms are established: *C. sharkeyi* Hayashi, 1994 = *C. kunashirensis* Michailov, 1990, *C. serrata* Zhang, 1993 = *C. manshanensis* M. Zhu et An, 1988, and *C. nigra* Zhang, 1993 = *C. irinae* Michailov, 1991. The faunas of *Clubiona* of the former USSR, Russia, and North Korea contain now 80, 72, and 7 species, respectively.

РЕЗЮМЕ: По материалам с юга Дальнего Востока России и из Северной Кореи описаны 10 новых видов рода *Clubiona*: *C. proszynskii* sp.n. (♂, Сев. Корея), *C. chechtsirica* sp.n. (♂, Большехехцирский заповедник, Хабаровский край), *C. paralena* sp.n. (♂, Сев. Корея), *C. kurenshikovi* sp.n. (♀, Большехехцирский заповедник), *C. nenilini* sp.n. (♀, Юж. Сибирь), *C. eskovi* sp.n. (♀, Приморье), *C. orientalis* sp.n. (♀, Сев. Корея), *C. zyuzini* sp.n. (♀, Приморье), *C. oligerae* sp.n. (♂, Приморье) и *C. evoronensis* sp.n. (♀, Хабаровский край). По новым материалам переописаны *C. mandschurica* Schenkel, 1953 (♂), *C. venusta* Paik, 1985 (♀) и *C. hummeli* Schenkel, 1936 (♀). Два вида впервые отмечены в фауне России. Подтверждено различие между близкими видами *C. pseudogermanica* Schenkel, 1936 и *C. mayumiae* Ono, 1993. Установлены три новых синонима: *C. sharkeyi* Hayashi, 1994 = *C. kunashirensis* Michailov, 1990, *C. serrata* Zhang, 1993 = *C. manshanensis* M. Zhu et An, 1988, и *C. nigra* Zhang, 1993 = *C. irinae* Michailov, 1991. С учетом дополнений и изменений фауна *Clubiona* бывшего СССР составляет 80 видов, России — 72 вида, а Северной Кореи — 7 видов.

This paper continues my research in the fauna of *Clubiona* of the East Palearctic [Mikhailov, 1990, 1991, 1992]. The bulk of material studied here has become available due to the courtesy of Mrs. T.I. Oliger (Nizhnesvirsky Reserve), Prof. J. Prószynski (during my visit to Warsaw in 1993), and Mr. D.K. Kurenshchikov (Khabarovsk).

All descriptions are arranged according to a traditional pattern. The following abbreviations are accepted: Cb — cymbium, F — femur, Mt — metatarsus, Pt — patella, T — tarsus, Ti — tibia, d. — dorsally, l. — laterally, rl. — retrolaterally, v. — ventrally. All measurements are given in mm. The number of specimens measured is indicated in brackets.

Material studied is kept in the following institutions: IWEP — Institute of Aquatic and Ecological Problems, Khabarovsk, IZ — Institute of Zoology, Polish Academy of Sciences, Warsaw, ZMUM — Zoological Museum, Moscow State University, ZIP — Zoological Institute, Russian Academy of Sciences, St-Petersburg. The names of some collectors have



Figs 1-3. *Clubiona proszynskii* sp.n., ♂, right palp: ventrally (1), ventro-retrolaterally (2), prolaterally (3).
Рис. 1-3. *Clubiona proszynskii* sp.n., ♂, правая пальпа: вентрально (1), вентро-ретролатерально (2), пролатерально (3).

been abbreviated as well: AR – A. Riedel, CD – C. Dziadosz, DK – D.K. Kurenshchikov, EI – Expedition of IZ, EK – E. Kierych, HS – H. Szelęgiewicz, MM – M. Mroczkowski, TO – T.I. Oliger, YM – Y.M. Marusik.

A typical pattern of leg armature in *Clubiona* is as follows: F I-II d.1.1.2, III-IV d.1.1.3, Pt III-IV rl.1, Ti I-II v.2.2, III d.2.2, v.1.1, IV d.2.2, v.1.1.1, Mt I-II v.2, III d.2.1.2, l.1.2, v.2.2, IV 2.1.2, l.2.2, v.2.1.2. Only deviations are given in the descriptions.

As a result of this contribution, 80 species of *Clubiona* are currently known from the ex-USSR, 72 of which occur in Russia. The genus has been reported from North Korea for the first time, with seven species involved.

In addition to some synonymies among Chinese *Clubiona* given below, I can state also that *C. acumina* M. Zhu et An, 1988 (p. 72-73, figs 1-6, ♂♀), from Shaanxi, does not belong to this genus, rather representing a *Trachelas*. *C. kasanensis* Paik, 1990 is also to be excluded from *Clubiona* (Y.M. Marusik, personal communication).

Taxonomic part

The *lutescens*-group

Clubiona proszynskii **sp.n.**
Figs 1-3.

MATERIAL: Holotype ♂ (IZ), North Korea, Pyongyang City, near Tomb of King Tongmen, 27.06.1990, EI.

DIAGNOSIS: The new species differs from other members of the *lutescens*-group by the smaller size, depression at the top of the cymbium, and tip of the embolus curved apically.

DESCRIPTION: MALE (1). Total length 3.68. Carapace length 1.65, width 1.10, ratio 1.50. Carapace, chelicerae and legs straw-coloured. Leg armature: Mt III d.2.1.2 (2.2), l.1.2(2), v.2.2 (1.2), IV d.2.1.2, l.2.2, v.2.2 (1.2). Leg measurements:

	I	II	III	IV
F	1.15	1.13	1.00	1.25
Pt	0.53	0.60	0.50	0.58
Ti	1.03	1.13	0.70	1.15
Mt	0.75	0.75	0.75	1.38
T	0.48	0.48	0.33	0.45

Palp as in Figs 1-3. F, Pt, Ti, and Cb 0.48, 0.23, 0.20, and 0.48 in length, respectively.

Abdomen: Length 2.00, width 0.90, ratio 2.22, pale brown.

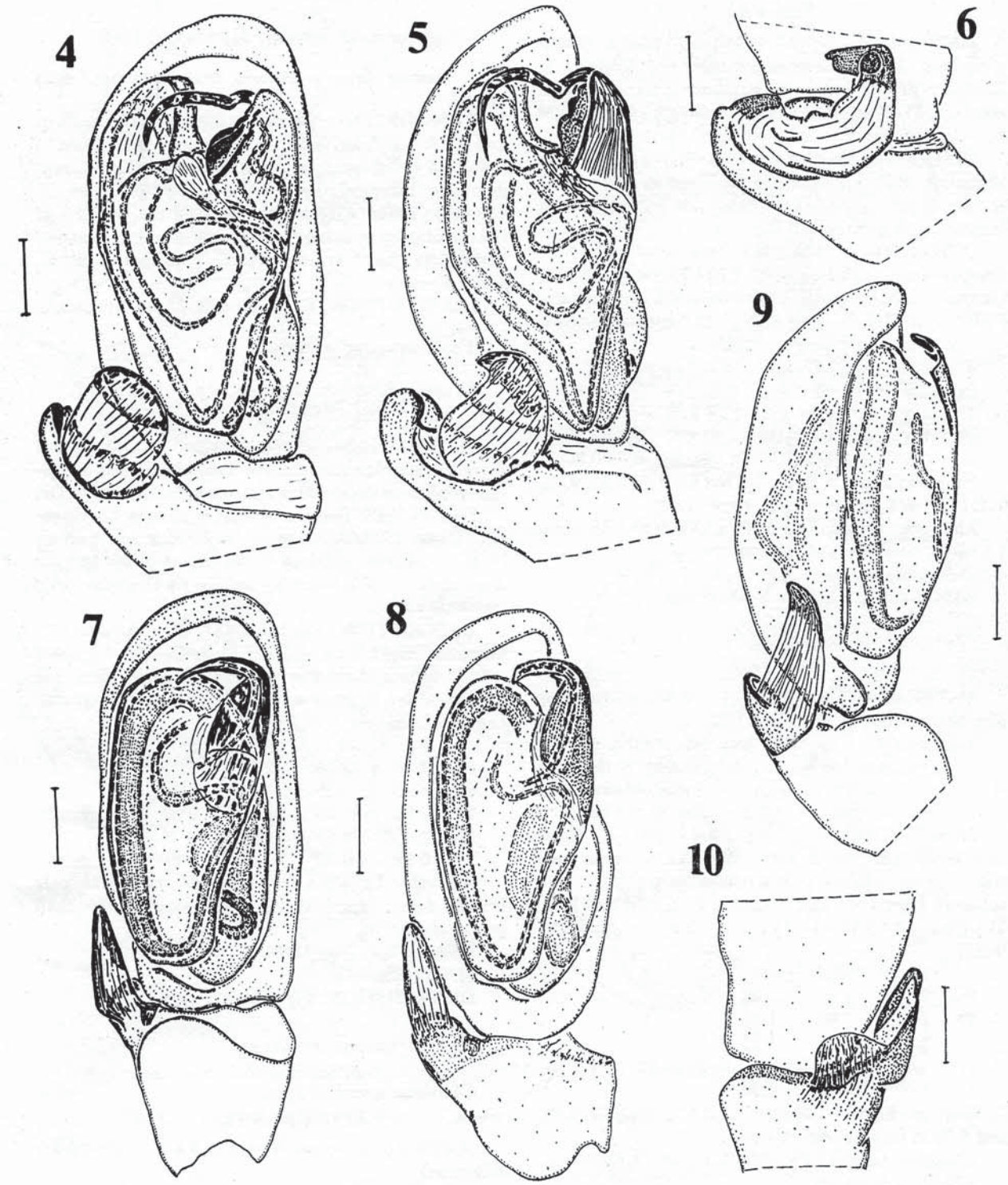
FEMALE unknown.

REMARKS: A decreased number of spines on Mt III-IV may be associated with the spider's small size.

The bulk of the constituents of the *lutescens*-group inhabits Europe, so *C. proszynskii* can prove to form a separate group.

DISTRIBUTION: Type locality only.

The *obesa*-group



Figs 4-10. 4-6: *Clubiona chechtsirica* sp.n., ♂, right palp: ventrally (4), ventro-retrolaterally (5), and tibial apophysis, retrolaterally (6). 7-10: *Clubiona paralena* sp.n., ♂, right palp: ventrally (7), ventro-retrolaterally (8), retrolaterally (9), dorsally (10).

Рис. 4-10. 4-6: *Clubiona chechtsirica* sp.n., ♂, правая пальпа: вентрально (4), вентро-ретролатерально (5), вырост голени, ретролатерально (6). 7-10: *Clubiona paralena* sp.n., ♂, правая пальпа: вентрально (7), вентро-ретролатерально (8), ретролатерально (9), дорсально (10).

Clubiona chechtsirica **sp.n.**
Figs 4-6.

MATERIAL: Holotype ♂ (ZMUM Ta-5169), Khabarovsk Prov., Bolshekhekhtsyrsky Reserve near Khabarovsk, Sosninsky Klyuch, coniferous-broadleaved forest, 420 m, grassland, 11-12.06.1992, D.K. — Paratype: 1 ♂ (ZMUM Ta-5170), ibidem.

DIAGNOSIS: The new species is close to *C. logunovi* Michailov, 1990, but differs in the structure of the tibial apophysis, its ventral branch being non-bifurcate, with the top curving dorsad.

DESCRIPTION: MALE (2). Total length 5.15-5.50. Carapace length 2.25-2.35, width 1.70-1.75, ratio 1.32-1.34. Carapace, chelicerae and legs straw-coloured. Leg armature: F I-II d.1.1.3, Ti IV d.2.2, v.1.1.1 (1.1, 1). Leg measurements:

	I	II	III	IV
F	2.03	2.05-2.13	1.75	2.28-2.38
Pt	0.90-0.930.	88-0.95	0.70-0.80	0.83-0.90
Ti	1.88-1.90	1.90	1.28-1.33	1.93
Mt	1.35-1.40	1.43-1.48	1.63-1.68	2.53-2.58
T	0.88	0.88	0.58-0.63	0.78-0.80

Palp as in Figs 4-6. F, Pt, Ti, and Cb 0.78-0.85, 0.38, 0.33-0.35, and 0.88 in length, respectively.

Abdomen: Length 3.05-3.10, width 1.30-1.85, ratio 1.68-2.35, pale chocolate-brown.

FEMALE unknown.

DISTRIBUTION: Type locality only.

Clubiona paralena **sp.n.**
Figs 7-10.

MATERIAL: Holotype ♂ (IZ), North Korea, Myohyang Mts, near Kumgang Cave, 10.06.1990, EI.

DIAGNOSIS: Close to *C. lena* Bösenberg et Strand, 1906 [cf. Hayashi, 1983, figs 1-2], differing by the more short dorsal branch of the tibial apophysis and more long embolus (longer than 1/2 of the width of the bulb).

DESCRIPTION: MALE (1). Total length 5.85. Carapace length 2.85, width 2.00, ratio 1.43. Carapace pale reddish-brown, chelicerae dark reddish-brown, legs straw-coloured. Leg (II missing) armature: F III d.1.1.3 (1.2.3), Ti III d.2.2, v.1.1 (1.1.1), IV d.2.2, v.2.1.1. Leg measurements:

	I	III	IV
F	2.35	2.00	2.68
Pt	1.20	1.00	1.13
Ti	2.40	1.55	2.25
Mt	1.68	1.88	2.90
T	1.05	0.73	0.90

Palp as in Figs 7-10. F, Pt, Ti, and Cb 1.00, 0.48, 0.35, and 0.80 in length, respectively.

Abdomen: Length 3.25, width 1.55, ratio 2.10, brown.

FEMALE unknown.

REMARKS: By the features of the ♀ genitalia [cf. Paik, 1990b, figs 14-15], *C. lena* belongs to the *obesa*-group (closer to *C. mimula* Chamberlin, 1928), the ♂ to the *pallidula*-group. Both species, *C. lena* and *C. paralena*, are attributed to the *obesa*-group only provisionally.

DISTRIBUTION: Type locality only.

The *latericia*-subgroup

Clubiona kunashirensis Michailov, 1990.

C. sharkeyi sp.nov. — Hayashi, 1994: 58-59, figs.7-9 (♀) **syn.n.!**

REMARKS. Examining the figures of *C. sharkeyi* and *C. kunashirensis* in the original descriptions, I found no differences in the structure of the internal genitalia between these species mentioned by T. Hayashi [1994]. Slight differences in the position of the copulatory openings are rather due to intraspecific variability. So I synonymize *C. sharkeyi* under *C. kunashirensis*.

DISTRIBUTION. Kurile Islands. Japan: Hokkaido.

The *corrugata*-subgroup

Clubiona kurenshikovi **sp.n.**
Figs 11-12.

MATERIAL: Holotype ♀ (ZMUM Ta-5171), Khabarovsk Prov., Bolshekhekhtsyrsky Reserve, Sosninskiy Klyuch, coniferous-broadleaved forest, 420 m, grass cover, 11-12.06.1992, DK.

DIAGNOSIS: The new species is close to *C. kimyongkii* Paik, 1990, differing by the copulatory openings lying in the rear part (not at the edge!) of the epigyne more close to each other, as well as by the more wide copulatory tubes.

DESCRIPTION: FEMALE (1). Total length 9.00. Carapace length 3.15, width 2.30, ratio 1.37. Carapace reddish-brown, chelicerae dark reddish-brown, legs pale reddish-brown to straw-coloured. Leg armature typical. Leg measurements:

	I	II	III	IV
F	2.40	2.48	2.15	3.13
Pt	1.25	1.25	1.08	1.25
Ti	2.00	2.05	1.50	2.33
Mt	1.45	1.55	1.63	3.05
T	0.93	0.95	0.75	0.88

Abdomen: Length 5.75, width 3.30, ratio 1.74, pale brown; dorsal lanceolate spot and longitudinal band poorly visible.

Epigyne as in Figs 11-12.

MALE unknown.

DISTRIBUTION: Type locality only.

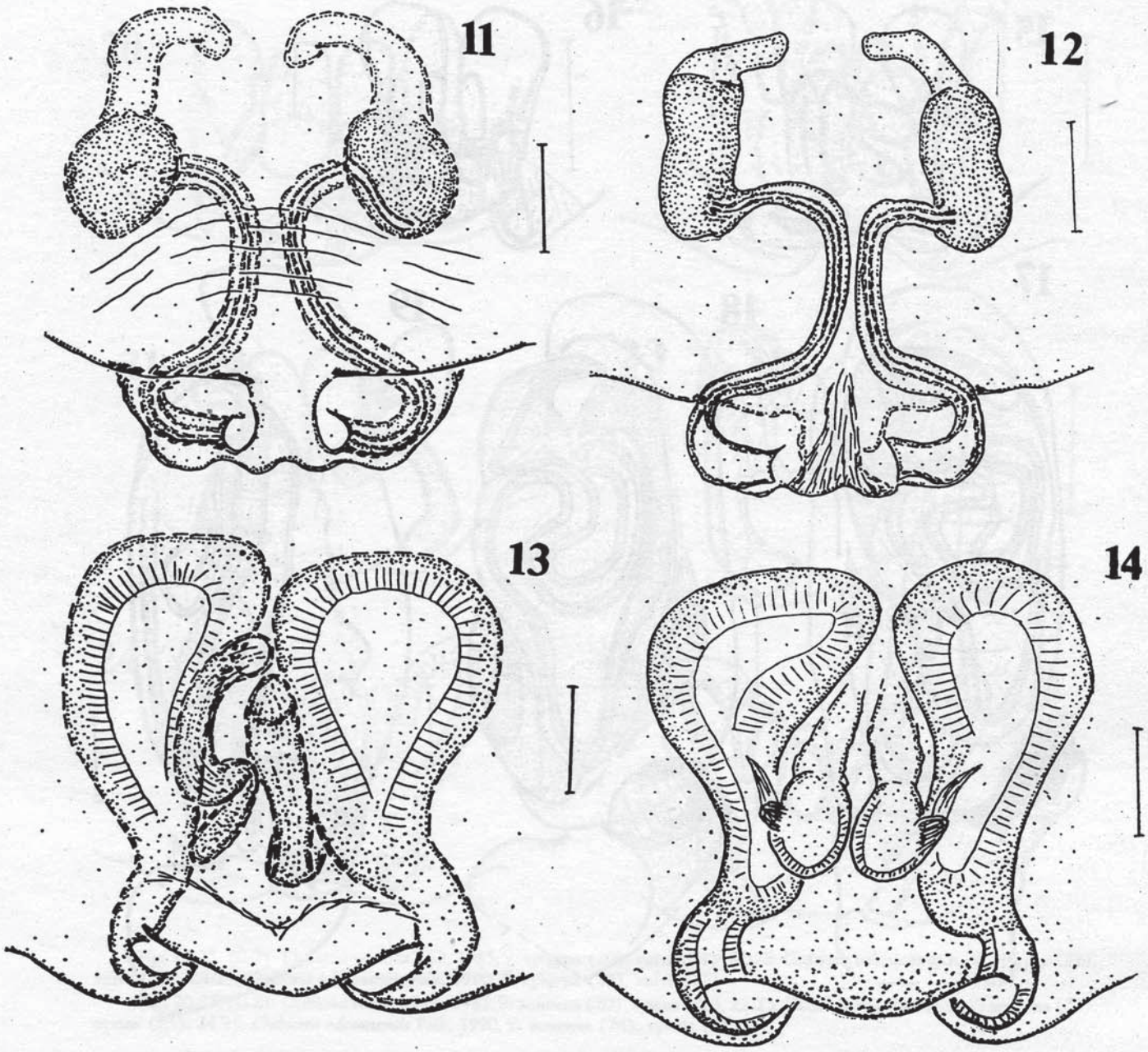
The *sapporensis*-subgroup

Clubiona nenilini **sp.n.**
Figs 13-14.

MATERIAL: Holotype ♀ (IZ), $S_4$458 (Kulczyński's collection).

DIAGNOSIS: The species differs from other members of the *sapporensis*-subgroup by the marginal position of the copulatory openings.

DESCRIPTION: FEMALE (1). Total length 7.75. Carapace length 3.08, width 2.20, ratio 1.40. Carapace, chelicerae and legs brown-reddish-brown. Leg armature typical. Leg measurements:



Figs 11-14. 11-12: *Clubiona kurenshikovi* sp.n., ♀: epigyne (11), vulva (12). 13-14: *Clubiona nenilini* sp.n., ♀: epigyne (13), vulva (14).

Рис. 11-14. 11-12: *Clubiona kurenshikovi* sp.n., ♀: эпигина (11), вульва (12). 13-14: *Clubiona nenilini* sp.n., ♀: эпигина (13), вульва (14).

	I	II	III	IV
F	2.13	2.13	1.83	2.50
Pt	1.13	1.13	0.98	1.13
Ti	1.70	1.70	1.25	1.95
Mt	1.28	1.25	1.48	2.60
T	0.83	0.78	0.63	0.75

Abdomen: Length 4.75, width 2.80, ratio 1.64, pale brown.

Epigyne as in Figs 13-14.

MALE unknown.

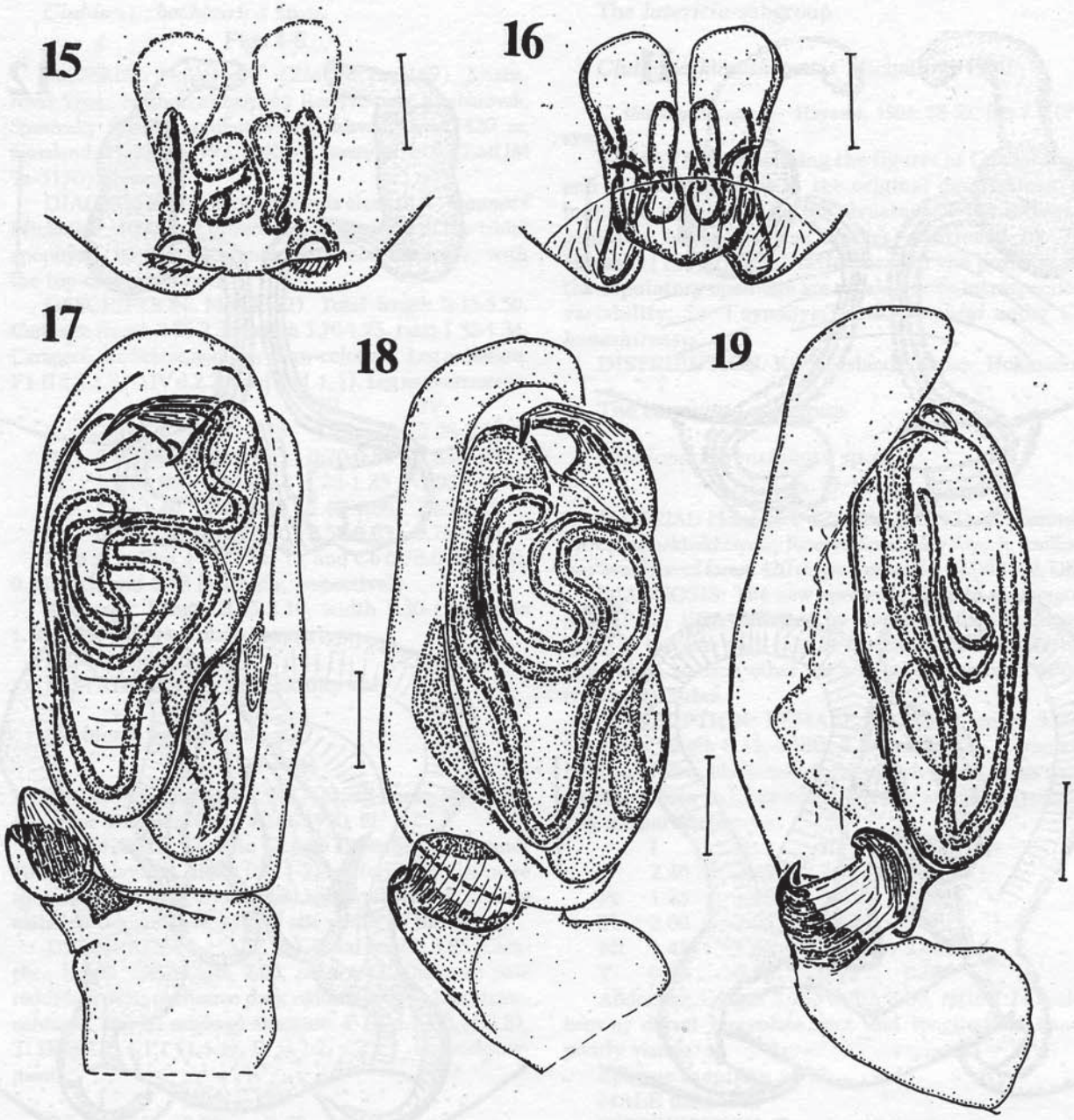
DISTRIBUTION: South Siberia, an exact locality unknown.

Clubiona eskovi **sp.n.**

Figs 15-16.

MATERIAL: Holotype ♀ (ZMMU Ta-5172), Maritime Prov., Lazovsky Distr., Petrova Island, oak forest, 08.1977, TO.

DIAGNOSIS: From other members of the subgroup,



Figs 15-19.15-16: *Clubiona eskovi* sp.n., ♀: epigyne (15), vulva (16). 17-19: *Clubiona mandschurica* Schenkel, 1953, ♂, right palp: ventrally (17), ventro-retrolaterally (18), and retrolaterally (19).

Рис. 15-19. 15-16: *Clubiona eskovi* sp.n., ♀: эпигина (15), вульва (16). 17-19: *Clubiona mandschurica* Schenkel, 1953, ♂, правая пальпа: вентрально (17), вентро-ретролатерально (18), ретролатерально (19).

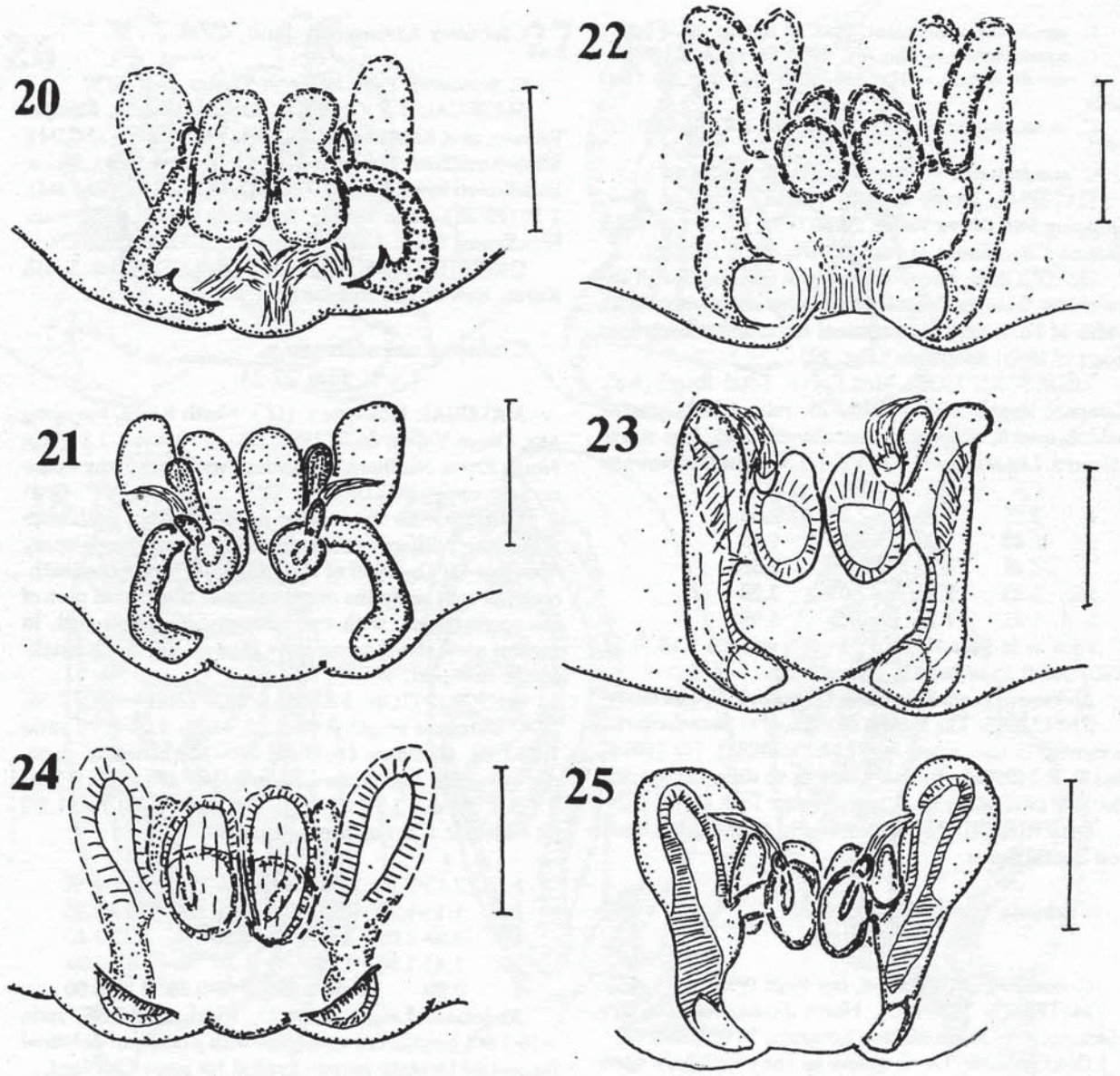
C. eskovi differs by the copulatory openings connected with the fissures extending to the epigastric furrow. *C. eskovi* seems to be most closely related to *C. microsapporensis* Michailov 1990, differing by the strongly straight copulatory tubes.

DESCRIPTION: FEMALE (1). Total length 3.75. Carapace length 1.88, width 1.25, ratio 1.50. Carapace, chelicerae and legs pale reddish-brown to straw-coloured. Leg armature: Ti III d.2.1 (1.1), v.1.1. Leg measurements:

	I	II	III	IV
F	1.13	1.23	1.00	1.53
Pt	0.65	0.65	0.55	0.70
Ti	0.98	1.00	0.68	1.23
Mt	0.68	0.75	0.83	1.50
T	0.50	0.50	0.40	0.50

Abdomen: Length 2.00, width 1.20, ratio 1.67, pale reddish-brown.

Epigyne as in Figs 15-16.



Figs 20-25. 20-21: *Clubiona venusta* Paik, 1985, ♀: epigyne (20), vulva (21). 22-23: *Clubiona orientalis* sp.n., ♀: epigyne (22), vulva (23). 24-25: *Clubiona odesanensis* Paik, 1990, ♀: epigyne (24), vulva (25).

Рис. 20-25. 20-21: *Clubiona venusta* Paik, 1985, ♀: эпигина (20), вульва (21). 22-23: *Clubiona orientalis* sp.n., ♀: эпигина (22), вульва (23). 24-25: *Clubiona odesanensis* Paik, 1990, ♀: эпигина (24), вульва (25).

MALE unknown.

DISTRIBUTION: Type locality only.

Clubiona manshanensis M. Zhu et An, 1988

C. manshanensis Zhu & An, 1988: 73-74, figs 9-11 (♂♀).
C. serrata Zhang, 1993: 165-167, figs 9-12 (♂♀), **syn.n.**!

REMARKS: The synonymy is obvious already from a comparison of the figures given in the original descriptions.

DISTRIBUTION: China: Hunan, Guizhou, Yunnan, Szechwan, Hubei, Hujian, Hebei.

The *irinae*-subgroup

Clubiona irinae Michailov, 1991

C. irinae Mikhailov, 1991: 208-210, figs 1-7 (♂♀).
C. nigra Zhang, 1993: 162-163, figs 1-4 (♂♀), **syn.n.**!

REMARKS: The synonymy is obvious already from a comparison of the pictures given in both original descriptions.

DISTRIBUTION: Southern Russian Far East. China: Jilin, Heilongjiang.

The *pallidula*-group

Clubiona mandschurica Schenkel, 1953
Figs 17-19.

C. mandschurica Schenkel, 1953: 61-63, fig. 29a-e (♂).
C. mandschurica – Zhu, Yu, 1982: 61, fig.2a-d (♂♀).
C. mandschurica – Hu, 1984: 294-295, fig. 310 (1-4) (♂♀).
C. mandschurica – Paik, 1990a: 105-107, figs 101-112 (♂♀).
C. mandschurica – Ono, 1994: 39-40, figs.3-4 (♂).

MATERIAL: North Korea: 1 ♂ (IZ), Kangvon Prov., Kumgang Mts, Okryu Valley, 22.06.1990, EI. — 1 ♂ (IZ), Kaesong City, canyon of Pagyon Falls, 30.06.1990, EI.

DIAGNOSIS: The ♂ differs by a combination of the following features: length of embolus comparable with width of bulb, very long seminal duct, and conspicuous shape of tibial apophysis (Fig. 19).

REDESCRIPTION: MALE (1). Total length 6.25. Carapace length 3.00, width 2.25, ratio 1.33. Carapace reddish-brown, chelicerae chestnut-coloured, legs straw-coloured. Leg armature: F I-IV d.1.3.3. Leg measurements:

	I	II	III	IV
F	2.75	2.90	2.25	2.88
Pt	1.40	1.38	1.00	1.13
Ti	3.18	3.10	1.73	2.58
Mt	2.33	2.25	2.05	3.28
T	1.25	1.23	0.70	0.98

Palp as in Figs 17-19. F, Pt, Ti, and Cb 1.18, 0.53, 0.40, and 0.95 in length, respectively.

Abdomen: Length 3.55, width 1.50, ratio 2.37, dark brown.

REMARKS: The figures of the ♀ of *C. mandschurica* presented in the papers by Zhu&Yu [1982], Hu [1984], and Paik [1990a] obviously belong to different species, the first two rather to *C. odesanensis* Paik, 1990.

DISTRIBUTION. Japan: Honshu, China: Jilin, North and South Korea.

Clubiona venusta Paik, 1985
Figs 20-21.

C. venusta Paik, 1985: 5-6, figs 19-28 (♀).

MATERIAL: 1 ♀ (IZ), North Korea, Kaesong City, Haesong, near Tomb of King Kongmin, 14.08.1987, EK.

DIAGNOSIS: The ♀ differs by the copulatory openings set off from the edge of the epigyne, very pale and poorly visible atrium, and arched copulatory tubes separated from each other (in ventral view) a little stronger than the atria.

DESCRIPTION: FEMALE (1). Total length 5.05. Carapace length 1.90, width 1.50, ratio 1.27. Carapace and chelicerae pale reddish-brown, legs straw-coloured. Leg armature typical. Leg measurements:

	I	II	III	IV
F	1.13	1.18	1.00	1.55
Pt	0.65	0.63	0.58	0.70
Ti	0.98	1.05	0.75	1.30
Mt	0.73	0.73	0.78	1.63
T	0.43	0.48	0.43	0.50

Abdomen: Length 3.15, width 1.90, ratio 1.66, pale.

Epigyne as in Figs 20-21.

MALE unknown.

REMARKS: The atrium is so poorly visible that it is missing from figs 24-25 in the original description.

DISTRIBUTION: South and North Korea.

Clubiona haeinsensis Paik, 1990

C. haeinsensis Paik, 1990a: 91-93, figs 16-31 (♂♀).

MATERIAL: 1 ♀ (ZMUM), Amurskaya Area, Khingan Reserve, near Karapcha, 22.08.1983, YM. — 1 ♀ (ZMUM), Khabarovsk Prov., Bolshekhekhtsyrsky Reserve, *Pinus sibirica*-broadleaved forest, litter, 10.06.1987, DL. — 2♀♀ (ZMUM), 1 ♀ (IWEP), same locality, Sosninsky Klyuch, coniferous-broadleaved forest, 420 m, grassland, 11-12.06.1992, DK.

DISTRIBUTION: Southern Russian Far East, South Korea. New to the Russian list!

Clubiona orientalis **sp.n.**
Figs 22-23.

MATERIAL: Holotype ♀ (IZ), North Korea, Kumgang Mts, Okryn Valley, 26.08.1987, EK. — Paratype: 1 ♀ (IZ), North Korea, Northern Hamgyong Prov., Kyongsang County, Sang-onpo-ri, 17.06.1990, EI.

DIAGNOSIS: From other members of the *pallidula*-group, the ♀ differs by the more closely located copulatory openings (at the level of the first parts of the spermathecae) as well as by the ovoid shape of the second part of the spermatheca, with the anterior edge positioned, in ventral view, level to no more than a half of the height of the first part.

DESCRIPTION: FEMALE (2). Total length 7.55-7.90. Carapace length 3.05-3.25, width 2.20-2.35, ratio 1.38-1.39. Carapace (reddish)-brown, chelicerae chestnut-coloured, legs straw-coloured. Leg armature: F I-III d.1.3.3, IV d.1.3.3 (1.1.2, 1.1.3), Mt IV d.2.1.2, l.2.2 (2.1.2), v.2.1.2. Leg measurements:

	I	II	III	IV
F	2.15-2.20	2.30-2.38	2.05-2.13	2.80-2.90
Pt	1.15-1.23	1.20-1.23	0.95	1.13-1.15
Ti	2.00-2.05	2.03-2.15	1.50	2.25-2.40
Mt	1.43-1.50	1.50	1.70	2.83-3.00
T	0.90	0.90-0.93	0.68-0.70	0.75-0.90

Abdomen: Length 4.5-4.75, width 2.50-2.55, ratio 1.76-1.90, greyish-brown or pale with a chestnut-coloured lanceolate-bandage pattern typical for some *Clubiona*.

Epigyne as in Figs 22-23.

MALE unknown.

REMARKS: The new species seems to be especially closely related to *C. odesanensis* Paik, 1990 (Figs 24-25) and *C. sopaikensis* Paik, 1990 [Mikhailov, 1991, figs 24-25]. *C. odesanensis* differs by the low level of both parts of the spermatheca in relation to the atrium.

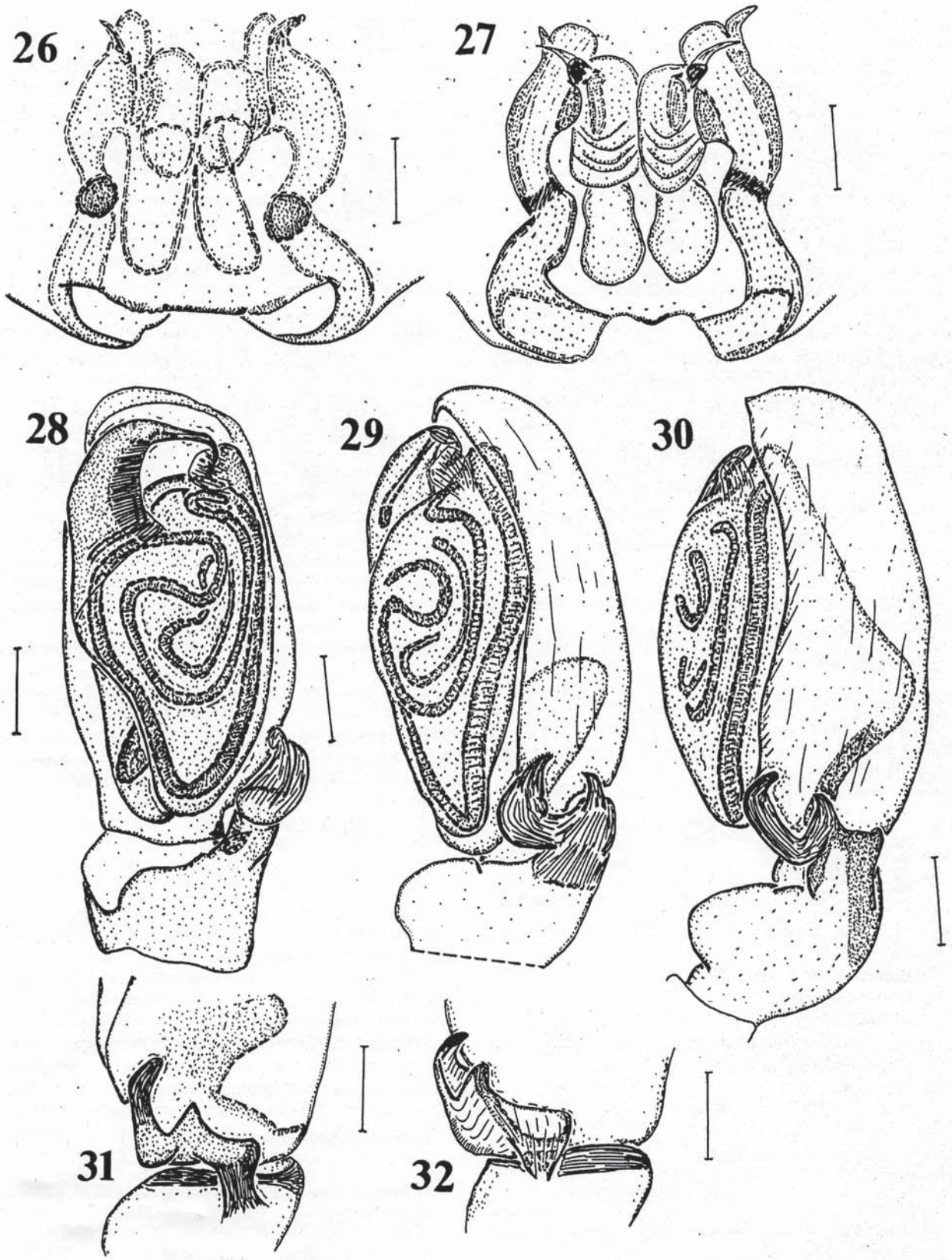
DISTRIBUTION: Type localities only.

Clubiona zyuzini **sp.n.**
Figs 26-27.

MATERIAL: Holotype ♀ (ZMUM Ta-5173), Maritime Prov., Lazovsky Reserve, Sukhoy Klyuch, valley forest, 26.06.1981, TO.

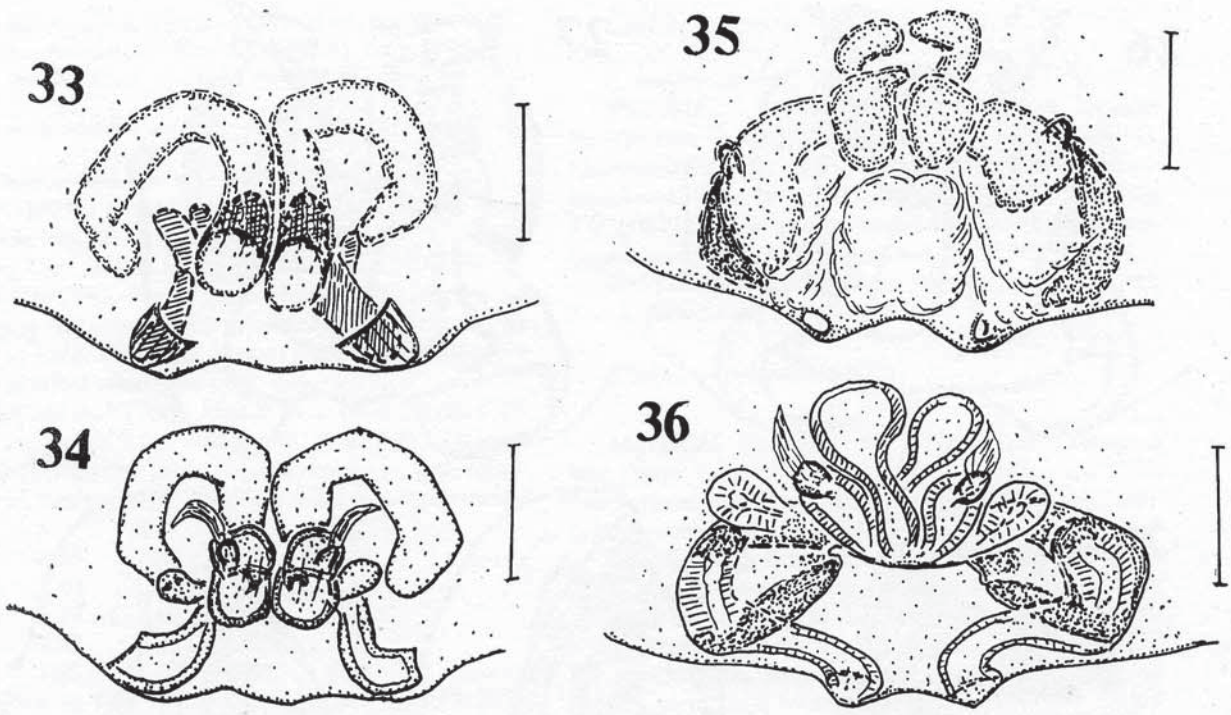
DIAGNOSIS: The new species is close to *C. langei* Michailov, 1991, differing by the unciform first part and more long second part of the spermatheca.

DESCRIPTION: FEMALE (1). Total length 9.80. Carapace length 4.50, width 3.50, ratio 1.29. Carapace



Figs 26-32.26-27: *Clubiona zyuzini* sp.n., ♀: epigyne (26), vulva (27). 28-32: *Clubiona oligerae* sp.n., ♂, left palp: ventrally (28), retrolatero-ventrally (29), retrolaterally (30), tibial apophysis, retrolatero-dorsally (31), dorsally (32).

Рис. 26-32. 26-27: *Clubiona zyuzini* sp.n., ♀: эпигина (26), вульва (27). 28-32: *Clubiona oligerae* sp.n., ♂, левый пальпус: вентрально (28), retrolatero-вентрально (29), ретролатерально (30), вырост голени, ретролатеро-дорсально (31), дорсально (32).



Figs 33-36. 33-34: *Clubiona hummeli* Schenkel, 1936, ♀: epigyne (33), vulva (34). 35-36: *Clubiona evoronensis* sp.n., ♀: epigyne (35), vulva (36).

Рис. 33-36. 33-34: *Clubiona hummeli* Schenkel, 1936, ♀: эпигина (33), вульва (34). 35-36: *Clubiona evoronensis* sp.n., ♀: эпигина (35), вульва (36).

brown to reddish-brown, chelicerae a little darker, legs straw-coloured. Leg armature: F I d.1.2.2 (1.3.2), II d.1.2.2, III d.1.3.3, Ti III d.2.2, v.1.1.1, IV d.2.2., v.2.1.1. Leg measurements:

	I	II	III	IV
F	3.25	3.25	2.88	3.83
Pt	1.75	1.70	1.43	1.60
Ti	3.05	3.18	2.13	3.10
Mt	2.15	2.25	2.53	4.20
T	1.23	1.30	1.00	1.15

Abdomen: Length 5.20, width 2.50, ratio 2.08, pale brown.

Epigyne as in Figs 26-27.

MALE unknown.

REMARKS: The structure of the vulva of the holotype has not been studied in detail. Maybe the unciform outgrowth belongs in fact to the atrium, not to the spermatheca.

DISTRIBUTION: Type locality only.

Clubiona oligerae **sp.n.**

Figs 28-32.

MATERIAL: Holotype ♂ (ZMUM Ta-5174), Maritime Prov., Lazovsky Reserve, Petrova locality, margin of mixed forest, 29.07.1976, TO.

DIAGNOSIS: The new species is close to the *propinqua*-subgroup, differing by the shape of the tibial apophysis: basis of the ventral branch is more thin, and the dorsal curve of the top of the ventral branch is less pronounced.

DESCRIPTION: MALE (1). Total length 5.25. Carapace length 3.00, width 2.00, ratio 1.50. Carapace reddish-brown, chelicerae missing. Legs straw-coloured, their armature: F I-II, IV d.1.1.3, III d.1.2.3 (1.3.3), Mt III d.2.1.2 (2.2), l.1.2, v.2.2. Leg measurements:

	I	II	III	IV
F	2.00	2.00	1.68	2.40
Pt	0.98	1.00	0.80	0.88
Ti	1.98	2.00	1.33	2.13
Mt	1.50	1.50	1.65	2.73
T	0.85	0.88	0.70	0.83

Palp as in Figs 28-32. F, Pt, Ti, and Cb 0.80, 0.35, 0.30, and 0.83 in length, respectively.

Abdomen: Length 2.80, width 1.80, ratio 1.56, cream reddish-brown.

FEMALE unknown.

DISTRIBUTION: Type locality only.

The *hummeli*-subgroup

Clubiona hummeli Schenkel, 1936

Figs 33-34.

C. hummeli Schenkel, 1936: 159-162, fig. 55a-b for ♂, c-d for ♀.
C. hummedi (sic!) — Hu, 1984: 290-291, fig. 305:1 (♀).
C. salictum (♀, non ♂!) Namkung & Kim, 1987: 25-26, figs 1, 6, 7 (♀).
C. hummeli — Paik, 1990a: 107-108, figs 113-120 (♀).
C. propinqua (♀, non ♂!) — Chen & Zhang, 1991: 246-247, fig. 257: 1-2 (♀).

MATERIAL: 1 ♀ (ZIP), Maritime Prov., Ussuriysk, 07.1968, L.D. Golosova. — North Korea (IZ): 1 ♀, Pyongyang, Mt. Moran, under stones & in litter, near foots

of rocks, 19.05.1965, MM & AR. — 1 ♀, Prov. Hvangenamdo, Sinchkhon, grass and under stones, near foots of rocks, 25.05.1965, MM & AR. — 1 ♀, Pyongyang, Marangbong Park, 23.08.1966, CD & HS.

DESCRIPTION: FEMALE (3, North Korea). Total length 5.10-5.60. Carapace length 1.90-2.45, width 1.40-1.65, ratio 1.36-1.50. Carapace (pale) reddish-brown, chelicerae (dark) reddish-brown, legs straw-coloured or pale reddish-brown. Leg armature: F IV d.1.1.3 (1.1.2), Ti II v.2.2 (1.2). Leg measurements:

	I	II	III	IV
F	1.28-1.43	1.28-1.55	1.15-1.33	1.58-1.95
Pt	0.65-0.83	0.70-0.85	0.60-0.73	0.70-0.88
Ti	0.98-1.23	1.00-1.25	0.70-0.80	1.23-1.43
Mt	0.73-0.88	0.75-0.90	0.88-1.05	1.58-1.93
T	0.50-0.53	0.50-0.63	0.43-0.50	0.50-0.63

Abdomen: Length 2.75-3.25, width 1.75-2.10, ratio 1.55-1.60, pale brown, sometimes with brown lanceolate and longitudinal spots.

Epigyne as in Paik [1990a, figs 117-120] and in Figs 33-34.

REMARKS: The 1965 specimen from Pyongyang differs by the more thick copulatory tubes (Figs 33-34). By almost all measurements this individual is the smallest among North Korean *hummeli*. Specimens from South Korea as described by Paik [1990a] are a little larger than North Korean ones. The type of *hummeli* is comparable in size with small North Korean specimens.

Conspecificity of the ♂ and ♀ described by Schenkel [1936] as *C. hummeli* is doubtful, since the ♂ is larger than the ♀ (total lengths 6.00 and 5.30, respectively). See also remarks under *C. pseudogermanica*.

DISTRIBUTION: Maritime Province. New to the Russian list!. China: Kansu, Shenxi, Jilin, Henan, Shangdong, Hunan, Anhui, Zhejiang. The illustration of *C. hummeli* from Szechwan [Chen, Gao, 1990, fig. 192, ♀] is quite obscure, so this record remains doubtful.

The *propinqua*-subgroup

Clubiona mayumiae Ono, 1993

C. pseudogermanica — Mikhailov, 1991: 219-220, figs 39-43 (♂♀).

C. mayumiae Ono, 1993: 90-92, figs 1-8 (♂♀).

REMARKS: Slight differences in the ♂ genitalia between the southern true *C. pseudogermanica* and the northern *C. mayumiae* have been first elucidated by Ono [1993]. I concur with their specific gap. The ♀ of *C. pseudogermanica* remains doubtfully known (see below).

DISTRIBUTION: Southern Russian Far East. Japan: Hokkaido.

Clubiona pseudogermanica Schenkel, 1936

C. pseudogermanica Schenkel, 1936: 55-56, fig. 53a, b (♂♀).

C. salictum (♂, non ♀!) Namkung & Kim, 1987: 24-25, figs 2-5, 8-11 (♂).

MATERIAL: 1 ♂ (IZ), North Korea, Kaesong, near Zoological Garden, 29.06.1990, EI.

REDESCRIPTION: MALE (1). Total length 3.60. Carapace length 1.78, width 1.30, ratio 1.37. Carapace reddish-brown, chelicerae and legs straw-coloured. Leg armature typical. Leg measurements:

	I	II	III	IV
F	1.40	1.38	1.13	1.60
Pt	0.68	0.68	0.55	0.63
Ti	1.20	1.20	0.83	1.28
Mt	0.93	0.93	1.00	1.65
T	0.60	0.58	0.40	0.50

Palp: Lengths of F, Pa, Ti, and Cb 0.63, 0.25, 0.23, and 0.68, respectively.

Abdomen: Length 2.06, width 1.08, ratio 1.98; pale greyish-brown.

REMARKS: It is quite possible that the ♀ of *C. pseudogermanica* is actually "*C. hummeli*" (= *C. salictum*), as suggested by Ono [1993] and Hayashi [1994]. In this case, the name *C. hummeli* is to be kept for the ♂ originally described by Schenkel [1936]. See also considerations under *C. hummeli*.

DISTRIBUTION. Japan: Honshu, South and North Korea, China.

The *reclusa*-group

Clubiona evoronensis **sp.n.**

Figs 35-36.

MATERIAL: Holotype ♀ (ZMUM), Khabarovsk Prov., Solnechnyi Distr., near Lake Evoron, *Abies-Picea* forest, litter, 06.1992, G.N. Ganin.

DIAGNOSIS: The new species seems to be particularly close to *C. canadensis* Emerton, 1890, and *C. pacifica* Banks, 1896, differing by the position of the atrium (closer to the epigastric furrow, not level to the spermatheca) as well as by the curved top of the spermatheca (in ventral view).

DESCRIPTION: FEMALE (1). Total length 5.60. Carapace length 2.35, width 1.75, ratio 1.34. Carapace and chelicerae pale reddish-brown, legs straw-coloured. Leg armature typical. Leg measurements:

	I	II	III	IV
F	1.53	1.53	1.35	1.95
Pt	0.83	0.83	0.70	0.83
Ti	1.28	1.33	0.95	1.55
Mt	0.90	0.90	1.13	1.93
T	0.65	0.63	0.53	0.68

Abdomen: Length 3.30, width 2.05, ratio 1.61, pale cream-brown.

Epigyne as in Figs 35-36.

MALE unknown.

DISTRIBUTION: Type locality only.

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