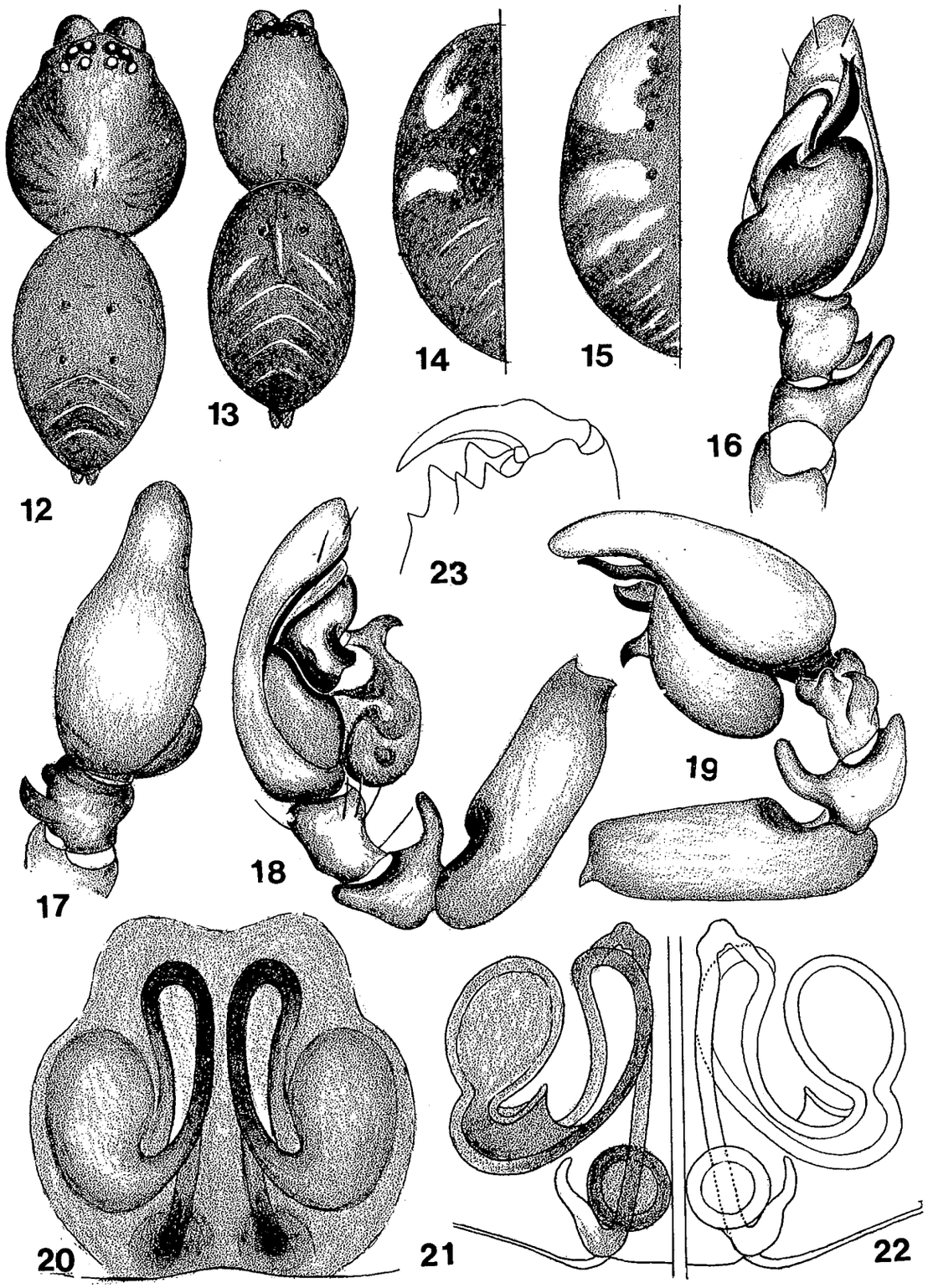


*KOREAN ARACHNOL.,*
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# The spider genus *Clubiona* Latreille 1804 in the Soviet Far East, 2 (Arachnida, Aranei, Clubionidae)

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## ABSTRACT

A faunistical, taxonomical, and zoogeographical data on the subgenus *Clubiona* s.str. (groups *obesa, pallidula, reclusa, caerulescens,* and *chabarovi* nov., as much as the species incertae sedis). The species subgroups *irinae* and *propinqua* are described in the species groups *obesa* and *pallidula,* respectively.

17 *Clubiona* species from the Soviet Far East are reported. 5 species are new for the USSR fauna. *C. ezoensis* Hayashi 1987 (♂♀), *C. propinqua* L.Koch 1879 (♂♀), *C. subinteriecta* Strand 1907 (♂♀), *C. pseudogermanica* Schenkel 1936(♂♀), *C. sopalkensis* Paik 1990(♂), *C. odesanensis* Paik 1990(♂), and *C. wolchongsensis* Paik 1990(♀) are redescribed. The ♀ of *C. sopalkensis* is described for the first time. New synonymy is established : *C. coreana* Paik 1990 (♂♀)=*C. japonica* L. Koch 1878 : *C. ussurica* Michailov, 1990 (♂♀)=*C. kimyongkii* Paik 1990. The distribution data of *C. propinqua* in China, Japan, and Korea are actually belongs to *C. pseudogermanica. C.irinae* sp. nov.(♂♀), *C. langei* sp. nov.(♀), *C. chabarovi* sp. nov.(♂♀), *C. zacharovi* sp. nov.(♂), *C. paiki* sp. nov.(♀), and *C. lyubarskii* sp. nov.(♀) are described.

For the map of locations, lists of both collectors and museums, see part 1 of my revision (Mikhalov, 1990). In the text, each locality is followed by the respective number put in square brackets ([ ]) and referring to the number in the map of part 1.

All the measurements given below are in mm : the number of analyzed specimens is given in brackets. Rare variations of leg armature are not presented.

No nomenclatorial remarks have been mentioned as regards well-known European species : for full nomenclature the reader must otherwise see Bonnet (1956).

## TAXONOMIC PART

(see also Part 1)

### Subgenus *Clubiona* sensu stricto

The "*obesa*"−group (see also Part 1)

The "*irinae*" −subgroup

**Male.** Tibial apophysis large, of a complex structure, bears one external and two internal processes. Tegular apophysis conceals embolic base. Embolus long, directed retrolaterad, then basad up to 2/3rds of bulbus length. Membraneous conductor present.

**Female.** Copulatory openings rounded, copulatory tubes directed mesad, then anteriad. Spermatheca in two parts, curved tubularly. Atrium globular, borders spermatheca. Posterior part of epigynal plate strongly sclerotized, corresponding to huge male tibial apophysis.

A single species is known :

### *Clubiona irinae* Michailov, sp. nov.

(Figs. 1−7)

*Holotype :* 1 ♂ (ZMMU Ta−4565) Khabarovsk Province, Bolshekhekhtsyrsky Reserve [31], 50−100m, old burning-place, *Quercus* etc. stand, 18. Ⅵ.1987 : leg.D.L.

*Paratypes :* Amur Area : 1♀ (ZMMU)−Zeyskiy Reserve [42], 16. Ⅶ. 1978 : leg. V.Be. −1♀ (AIK) Khingan Reserve [38], environs of Karapcha Kordon, near Karapcha River, 20. Ⅵ.1983 : leg.Yu.M. −1♂ (AIK) Khingan Reserve, environs of Karapcha Kordon, grassland in a forest, 20. Ⅷ.1983 : leg.Yu.M. −1♀ (ZMMU) ibidem, *Picea* stand, 22. Ⅷ. 1983 : leg.Yu.M. −Khabarovsk Province : 1♂ (ZMMU) Jewish Autonomous Region, Dichun [37], 8. Ⅷ.1978 : leg. V.Be. −1♂ 2♀ (ZMMU) 1♀ (NHMW) Nanayskiy distr. [29], *Betula* stand, litter, 1983 : leg. N.R. −1♀ (ZMMU) Khabarovsk [30], cemetery, on a bush, 25. Ⅵ.1931 : leg. V.P. −1♀ (ZMMU) environs of Khabarovsk [30], Krasnaya Rechka, Ussuri River, bush, 8−9. Ⅶ.1931 : leg. V.P. −1♀ (ZMMU) Khor [32], Khor River, bush, 31. Ⅶ.1931 : leg. V.P. −Khabarovsk Province, Bolshekhekhtsyrsky Reserve [31] : 1♀ (AIK) *Betula* sparse stand with *Rhododendron,* 850−900m, between stones, 8. Ⅵ.1987 : leg. D.L. −1♀ (NHMW) ibidem, pitfall traps, 9. Ⅵ−25. Ⅶ.1987 : leg.D.L. −1♂ (NHMW) *Populus tremula, Fraxinus* forest, 150−200m, 11. Ⅵ.1987 : leg.D.L. −1♂ 1♀ (SMF) lowland plain forest with *Quercus, Betula, Fraxinus, Populus tremula,* etc., 250−300m, along a road, 13. Ⅵ.1987 : leg.D.L. −1♂ 3♀ (ZMMU) ibidem, 14. Ⅵ.1987 : leg.D.L. −1♀ (AIK) ibidem, grassland in a forest, 100−500m, 14. Ⅵ.1987 : leg.D.L. −1♂ 1♀ (AIK) 1♂ (ZIL) grassland after a felling, 15. Ⅵ.1987 : leg.D.L. −3♀ (ZLL) sparse stand of *Quercus, Larix, Betula* etc. with ferns, 16. Ⅵ.1987 : leg.D.L. −1♀ (ZMMU) swampy forest, 18. Ⅵ.1987 : leg. D.L. −1♂ (ZMMU) ibidem, *Quercus, Larix* etc. 19. Ⅵ.1987 : leg.D.L. −1♂ 3♀ (BMNH) *Quercus, Betula, Populus tremula, Lonicera* forest, 19. Ⅵ.1987 ; leg.D.L. −1♂ 1♀ (BIN) 4♂ 1♀ (ZMMU) as of 13. Ⅵ, 22. Ⅵ.1987 : leg.D.L. −1♂ (NHMW) 2♂ (ZMMU) ibidem, grassland, 22. Ⅵ.1987 : leg.D.L−1♀ (ZMMU) *Betula, Populus tremula* forest, 8−10. Ⅷ.1987 : leg.S.I. −2♀ (BIN 31) 400m from Chirok River, road to Nevelskoe, forest margin, Ⅴ.1988 : leg.S.I. −1♂ (BIN 32) Bykova River, 2. Ⅵ.1988 : leg.S.I. Sakhalin : 1♂ (ZMMU) Alexandrovsk distr., environs of Bereg Arkovo, 27. Ⅵ.1988 : leg.A.B. −2♀ (ZMMU) Alexandrovsk [44] distr., environs of Mgachi, 29. Ⅵ−6. Ⅷ.1988 : leg.A.B. −1♂ (AIK) smirnykh [46] distr., Matrosovka River, environs of Vozvrashchenia Mt., 9. Ⅸ.1988 : leg.A.B. −1♀ (ZMMU) Poronaysk [49] distr., Vitnitsa River, 27. Ⅹ.1987 : leg.A.B. −1♀ (AIK) Poronaysk distr., upper flow of Rukutam River [48], litter, 17−24. Ⅳ.1988 : leg. A.B. −2♀ (ZMMU) Makarov distr., middle flow of Nituy River [50], 13−18. Ⅴ.1988 : leg.A.B. −1♂ (ZIL) Makarov distr., Pugachevo [52], 5−6. Ⅸ.1988 : leg.A.B. −2♀ (ZMMU) Aniva [57] distr., Lugovoe, 28. Ⅵ.1984 : leg.A.B−1♂ (ZMMU) Aniva distr., environs of Novoalexdrovsk [55], 3. Ⅵ.1988 : leg.A.B. −Maritime Province : 1♀ (BIN 33) middle flow of Bikin River [61], 1−5. Ⅵ.1977 : leg.Yu.Sh. −2♀ (BIN 34) ibidem, 6−8. Ⅵ.1977 : leg.Yu.Sh. −1♂ (BIN 35) ibidem, 10−16. Ⅵ.1977 : leg.Yu.Sh. −1♂ (ZMMU) Ussuriyskiy Reserve [69], environs of Kamenushka, 30. Ⅶ.1981 : leg.G.B. −1♂ (ZMMU) ibidem, 19. Ⅷ.1983 : leg.A.An. −1♂ 1♀ (ZMMU) Kedrovaya Pad Reserve [71], Yasnaya Polyana, 5. Ⅵ.1976 : leg.B,Z.



**Diagnosis.** The male differs from other representatives of the "*obesa*"−group by the huge complex tibial apophysis. The female differs by the position of the copulatory openings, broad copulatory tubes, and tubular spermathecae.

**Male** (10). Carapace length 3.48±0.47 (12), width 2.57±0.29 (12), their ratio 1.35±0.13 (12). Carapace reddish-coloured, dark cream coloured, or pale reddish greyish-brown. Cheliceres chestnut-coloured, rarely dark cream-coloured or reddish-coloured. Legs dark cream-coloured, rarely reddish-coloured or pale reddish-greyish-brown. Leg armature ; femur Ⅰ−Ⅱ dorsally 1・1・2, Ⅲ dorsally 1・2・3(1・3・3, 1・1・3), Ⅳ dorsally 1・1・3, patella Ⅲ−Ⅳ retrolaterally 1, tibia Ⅰ−Ⅱ ventrally 2・2, Ⅲ−Ⅳ dorsally 2・2, ventrally 2・1・1 (1・1・1), metatarsus Ⅰ−Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2(2・2), ventrally 2・2(2・1・2), Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|---|
| Femur | ♂ | 3.01±0.30 | 3.10±0.31 | 2.52±0.24 | 3.34±0.30 |
| | ♀ | 2.55±0.20 | 2.67±0.22 | 2.29±0.28 | 3.11±0.25 |
| Patella | ♂ | 1.45±0.08 | 1.48±0.10 | 1.21±0.14 | 1.36±0.12 |
| | ♀ | 1.42±0.15 | 1.44±0.18 | 1.18±0.15 | 1.39±0.13 |
| Tibia | ♂ | 3.00±0.35 | 3.03±0.33 | 1.96±0.28 | 2.86±0.32 |
| | ♀ | 2.29±0.22 | 2.33±0.24 | 1.65±0.15 | 2.53±0.22 |
| Metatarsus | ♂ | 2.17±0.20 | 2.21±0.22 | 2.37±0.22 | 3.71±0.43 |
| | ♀ | 1.63±0.20 | 1.68±0.22 | 1.97±0.20 | 3.20±0.35 |

| | | | | | |
|---|---|---|---|---|---|
| Tarsus | ♂ | 1.31±0.12 | 1.30±0.10 | 0.84±0.08 | 1.06±0.08 |
| | ♀ | 1.01±0.12 | 1.06±0.15 | 0.77±0.06 | 0.94±0.13 |

Palp see figs. 1−4. Lengths of cymbium, tibia, patella, and femur are 1.41±0.61, 0.49±0.06, 0.58±0.11, 1.26±0.22, respectively.

Abdomen length 4.21±0.76 (12), width 2.32±0.76(12), width 2.32±0.76 (12), their ratio 1.84±0.41 (12), dark brown, rare brown or yellowish-greyish-brownish-coloured.

**Female** (10). Carapace length 3.73±0.42 (17), width 2.77±0.31 (17), their ratio 1.35±0.11 (17). Carapace reddish, (pale) reddish-greyish-brown, tobacco brown, walnut or dark cream-coloured. Cheliceres chestnut-coloured, legs dark cream-coloured or reddish. Leg armature : tibia Ⅲ dorsally 2・2, ventrally 1・1・1 (2・1・1, 1・1), Ⅳ dorsally 2・2, ventrally 1・1・1(2・1・1), metatarsus Ⅲ dorsally 2・1・2, laterally 1・2(2・2), ventrally 2・2, others as in male. Leg measurements see above.

Abdomen length 5.49±1.50 (17), width 3.62±1.16 (17), their ratio 1.51±0.17 (17), dark brown, rare brown or pale. Epigyne see figs. 5−7.

**Distribution.** USSR−far East (southern part).

**Etymology.** The species is dedicated to my wife, ornithologist Irina M. Marova

### The "*pallidula*" - group

**Male.** Tibial apophysis either thick, with a cluster of small processes and a basal depression inside this cluster (*C. pallidula* ; but *C. odesanensis* without such depression) or thin, with two processes (*C. phragmitis,* the "*propinqua*"−subgroup). Vetral process sometimes of a semicircular shape, directed ventrad, then recurving dorsad (the "*propinqua*" subgroup).

Tegulum rather convex, with a thick apophysis bearing a tooth (*C. pallidula, C. odesanensis*) or toothless. Tegulum conceals embolic base (*C. pallidula*) or strongly sclerotized, dagger-like (*C. phragmitis,* the "*propinqua*" subgroup), directed retrolaterad up to 1/2−2/3rds of bulb width, with a free tip. Conductor absent. Seminal duct long and sinuous.

**Female.** Copulatory openings ovoid, shallow, located in posterior angles of epigynal plate, directed posteriad and laterad. Copulatory tubes arched mesad. Spermatheca in two parts : the first small, elongate, located more laterally, and the second large, ovoid ventrally, but arched dorsad, located more mesally. Atrium large, resembles in its shape the smaller part of spermatheca.

The group includes 8 species : 7 (except for *C. phragmitis* C.L. Koch 1843) found in the Soviet Far East.



### *Clubiona pallidula* (Clerck 1757)

1965 *Clubiona pallidula* : Wiehle : Abb. 38−43 (♂♀).

1968 *Clubiona pallidula* : Azheganova : 130, 132, figs. 302, 315 (♂♀).

1971 *Clubiona pallidula* : Tyshchenko : 130, 132, figs. 319, 329 (♂♀).

1982 *Clubiona pallidula* : Dondale, Redner : 95−96, figs. 174−177(♂♀) , map 26.

**Material.** 1♀ (ZMMU) Khabarovsk Province, Jewish Autonomous Region, 5−6 km upstream by Amur River of Amurzet [56], island, 56m, grassland, 22.Ⅵ.1988 : leg.D.K.

**Distribution.** USSR−European part, Caucasus, S−Ural, E−& N−Kazakhstan, S−Siberia. Holarctics.

### *Clubiona ezoensis* Hayashi, 1987

(Figs. 8−16)

1987 *Clubiona ezoensis* Hayashi : 36, 39, figs. 15−22 (♂♀).

**Material.** Amur Area : 1♂ (ZMMU) Khingan Reserve [38], environs of Karapcha Kordon, Picea forest, litter, 22.Ⅷ.1983 : leg. Yu. M.−Sakhalin : 1♂ (AIK) Okha distr., environs of Tenga, lower stream of Tenga River [43], 8−10.Ⅴ.1987 : leg.A.B.−1♂ (ZMMU) environs of Alexandrovsk [44], 25. Ⅵ.1988 : leg.A.B−1♀ (BIN 36) 1♀ (NHMW) Alexandrovsk [44] distr., environs of Mgachi, 29.Ⅵ−6.Ⅶ.1988 : leg.A.B−1♀ (ZMMU) Makarov [51] distr., Tsapko, 2.Ⅷ.1987 : leg.A.B−1♀ (AIK) Kholmsk distr., Slepikovskogo Cape [53], 24 Ⅸ.1978 : leg.A.B.−Kunashir : 1♂ 1♀ (ZMMU) Mendeleevo-Okeanskaya-Sernovodsk [59], 27−28.Ⅵ.1985 : leg.G.L.−1♀ (ZMMU) Mendeleeva Volcano [59], Kisliy Stream, 4.Ⅷ.1988 : leg.A.B.

**Male** (3). Carapace length 3.15−3.20, width 2.25−2.30, their ratio 1.37−1.42. Carapace and cheliceres (yellowish)-reddish, legs reddish or dark cream-coloured. Leg armature : femur Ⅰ dorsally 1・3・3 (1・2・3, 1・1・3), patella Ⅱ dorsally 1・3・3 (1・1・3) Ⅲ dorsally 1・3・3, Ⅳ dorsally 1・3・3 (1・2・3), patella Ⅲ-Ⅳ retrolaterally1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 2・1 (1・1・1), Ⅳ dorsally 2・2, ventrally 2・1・1 (1・1・1), metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・1 (1・1・1), metatarsus 1・2, ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|---|
| Femur | ♂ | 2.65−2.88 | 2.70−2.88 | 2.30−2.55 | 2.90−2.28 |
| | ♀ | 2.33±0.25 | 2.45±0.15(6) | 2.15±0.06 | 2.87±0.40 |
| Patella | ♂ | 1.35−1.38 | 1.35−1.40 | 1.00−1.13 | 1.23−1.25 |
| | ♀ | 1.31±0.08 | 1.34±0.12(6) | 1.12±0.09 | 1.26±0.11 |
| Tibia | ♂ | 2.50−2.68 | 2.58−2.70 | 1.80−1.90 | 2.58−2.73 |
| | ♀ | 2.03±0.16 | 2.10±0.14(6) | 1.53±0.14 | 2.32±0.22 |

| | | | | | |
|---|---|---|---|---|---|
| Metatarsus | ♂ | 1.80−1.93 | 1.88−2.00 | 2.05−2.20 | 3.25−3.50 |
| | ♀ | 1.49±0.12 | 1.52±0.11(6) | 1.80±0.17 | 2.89±0.26 |
| Tarsus | ♂ | 1.15−1.20 | 1.13−1.20 | 0.80−0.88 | 0.83−1.08 |
| | ♀ | 0.94±0.10 | 0.96±0.07(6) | 0.74±0.08 | 0.93±0.07 |

Palp see figs. 8−14. Lengths of cymbium, tibia, patella, and femur are 1.10−1.15, 0.43−0.53, 0.45−0.53, 1.03−1.08, respectively.

Abdomen length 2.70−4.10, width 2.00−2.60, their ratio 1.58−1.85, reddish-greyish-brownish-coloured or tobacco brown.

**Female** (7). Carapace length 3.49±0.21, width 2.51±0.26, their ratio 1.40±0.19. Carapace reddish, cheliceres chestnut-coloured, legs dark cream-coloured. Leg armature : femur Ⅰ−Ⅱ dorsally 1・12, Ⅲ dorsally 1・3・3 (1・2・3), Ⅳ dorsally 1・1・3, tibia Ⅲ dorsally 2・2, ventrally 1・1 (1・1・1, 1), Ⅳ dorsally 2・2, ventrally 1・1・1 (2・1・1), metatarsus Ⅲ dorsally 2・1・2, laterally 1・2 (2・2), ventrally 2・2, others as in male. Leg measurements see above.

Abdomen length 5.41±1.57, width 3.41±0.96, their ratio 1.58±0.14, from pale to dark brown, Epigyne see figs. 15−16.

**Distribution.** USSR−southern Far East (except for Primorye). Japan.

New for the USSR fauna.

**Remarks.** In the original description (Hayashi 1987, figs. 17−19) the location of the copulatory openings was shown, wrong and the smaller atria as if completely missing. This may be accounted for the atrium situated rather far from the spermatheca.

### *Clubiona odesanensis* Paik, 1990

(Figs. 17−21)

1990 *Clubiona odesanensis* Paik : 96−98, figs. 47−58 (♂♀).

**Material.** 1♂ (ZMMU) Maritime Province, Ussuriyskiy Reserve [69], Kamenushka, 27.Ⅷ.1983 : leg.A.An.

**Diagnosis.** The male resembles the "*obesa*"−group by the structure of the palp, but differs by the single (without any depression) tibial apophysis and a double ridge on the tegular apophysis.

**Male.** Carapace length 2.55, width 2.05, their ratio 1.24. Carapace, cheliceres, and legs dark cream-coloured. Leg armature : femur Ⅰ-Ⅳ dorsally 1・1・3, patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2 Ⅲ dorsally 2・2, ventrally 1・1・1, Ⅳ dorsally 2・2, ventrally 2・1・1, metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2, ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Metatarsus and tarsus Ⅰ-Ⅱ with dense hairs. Leg measurements :



| | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|
| Femur | 2.03 | 2.10 | 1.80 | 2.50 |
| Patella | 1.03 | 1.08 | 0.88 | 1.00 |
| Tibia | 1.95 | 1.95 | 1.30 | 1.98 |
| Metatarsus | 1.38 | 1.38 | 1.58 | 2.60 |
| Tarsus | 0.83 | 0.78 | 0.58 | 0.78 |

Palp see figs. 17−21. Lengths of cymbium, tibia, patella, and femur are 1.05, 0.30, 0.38, 0.80, respectively.

Abdomen length 3.00, width 1.75, their ratio 1.71, olive grey.

**Distribution.** USSR−Primorye. Korea.

New for the USSR fauna.

**Remark.** The species is placed into the "*pallidula*"−group by the structure of the female genitalia (Paik 1990, figs. 53−55).

### *Clubiona langei* Michailov, sp. nov

(Figs. 22−23)

*Holotype* : 1♀ (ZMMU Ta-4566) Khabarovsk Province, Bolshekhekhtsyrskiy Reserve [31], Korfovskiy, *Salix* in a stream floodland, 5−10.Ⅷ.1987 ; leg.S.I.

*Paratypes* : 1♀ (AIK), 1♀ (BIN 37) 2♀ (ZMMU) ibidem.−Maritime Province : 1♀ (ZMMU) Kedrovaya pad Reserve [71], Khalban Mt., 17.Ⅸ.1977 ;:leg.B.Z.

**Diagnosis.** The female differs from the other representatives of the "*pallidula*"-group by both atrium and the second part of the spermatheca ovoid, as well as the copulatory openings expanding posteriad above the epigastric fissure.

**Female** (6). Carapace length 4.05±0.86, width 2.98±0.62, their ratio 1.36±0.11. Carapace reddish or pale reddish-greyish-brown, cheliceres chestnut-coloured, legs dark cream-coloured. Leg armature : femur Ⅰ dorsally 1・3・2 (1・2・2, 1・1・2), Ⅱ doraslly 1・3・2 (1・2・2, 1・1・2, 1・3・3), Ⅲ dorsally 1・3・3, (1・2・3, 1・3・3), patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1・1 (2・1・1, 1・1), Ⅳ dorsally 2・2, ventrally 2・1・1 (1・1・1), metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ doraslly 2・1・2, laterally 1・2, ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|
| Femur | 2.93±1.03 | 3.14±0.60 | 2.62±0.54 | 3.44±0.64 |
| Patella | 1.61±0.31 | 1.63±0.34 | 1.29±0.29 | 1.47±0.27 |
| Tibia | 2.76±0.57 | 2.84±0.59 | 1.87±0.39 | 2.80±0.54 |
| Metatarsus | 1.96±0.42 | 2.02±0.39 | 2.23±0.39 | 3.70±0.62 |
| Tarsus | 1.16±0.14 | 1.17±0.13 | 0.85±0.17 | 1.07±0.16 |

Abdomen length 6.13±1.70, width 3.56±1.35, their ratio 1.74±0.26, from pale to dark brown. Epigyne see figs. 22−23.

Male unknown.

**Distribution.** USSR−southern Far East.

**Etymology.** The species is dedicated to the famous Soviet arachnologist and acarologist, Dozent of the Chair of Entomology of the Biological Faculty of the Moscow State University, Alexander B. Lange.

### *Clubiona sopaikensis* Paik, 1990

(Figs. 24−29)

1990 *Clubiona sopaikensis* Paik : 93−94, figs. 32−39(♂).

**Material.** 1♂ (ZMMU) Sakhalin, Smirnykh distr., upper stream of Langeri River [47], 11.Ⅸ.1988 ; leg.A.B.−Amur Area : 1♂ 1♀ (ZMMU) Kundur [38], 13.Ⅺ.1981 : leg.G.B. −1♂ (AIK) Amur River, Sennoy Isl. [40], 700 km upper of Khabarovsk, 870m, *Artemisia*-multiherbaceous grassland, 26.Ⅵ.1988 : leg.D.K.−Khabarovsk Province : 1♂ (BIN 38) Jewish Autonomous Region, Amur River, Sredniy Isl. [35], 353 km upper of Khabarovsk, 50m, *Quercus* forest, litter, 20.Ⅵ.1988 ; leg.D.K.−1♂ (ZMMU) Jewish Autonomus Region, Leninskiy distr., Rybachiy Isl. [34], Amur River, 240 km upper of Khabarovsk, 45m *Artemisia* grassland, 18.Ⅵ.1988 ; leg.D.K.−1♀ (ZMMU) environs of Khabarovsk [30], Ussuri River, Krasnaya Rechka, bush, 8−9.Ⅶ.1931 ; leg. V.P.−1♀ (ZMMU) Khor [32], Khor River, under stones, 31.Ⅷ.1931 ; leg. V.P.−Maritime Province : 1♂ (ZMMU) Khorol [66], forest margin, litter, 16.Ⅵ.1981 ; leg.G.B.−1♀ (ZMMU) Khasan [72] distr., Doritsine Lake, 5.Ⅸ.1956 ; leg. Ya.S. & I.L.−1♀ (ZMMU) Kedrovaya Pad Reserve [71], 28.Ⅶ.1986 ; leg.B.Z.

**Diagnosis.** By the structure of the palp, the male resembles the "*propinqua*"−subgroup, but differs in the shape of the tibial apophysis and attenuating embolus. The female differs from other members of the "*pallidula*"−group by the small epigyne, large second part of the spermatheca, and equal size of both atrium and first part of spermatheca.

Male (6). Carapace length 2.48±0.66, width 1.83±0.49, their ratio 1.36±0.18. Carapace, dark cream-coloured, reddish-greyish-brown, reddish or yellow-orange. Cheliceres chestnut-coloured, reddish or pale reddish-greyish-brown. Legs dark cream-coloured or reddish. Leg armature : femur Ⅰ-Ⅱ dorsally 1・1・3 (1・1・2), Ⅲ-Ⅳ dorsally 1・1・3, patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1・1 (1・1, 2・1・1), Ⅳ dorsally 2・2, ventrally 2・1・1(1・1・1), metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2(2・2), ventrally 2・2 Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :



| | | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|---|
| Femur | ♂ | 2.01±0.47(5) | 2.06±0.94(5) | 1.74±0.54 | 2.41±0.61 |
| | ♀ | 2.36±0.25 | 2.42±0.33 | 2.07±0.27 | 2.90±0.36 |
| Patella | ♂ | 1.02±0.32(5) | 1.03±0.31(5) | 0.83±0.32 | 0.97±0.24 |
| | ♀ | 1.28±0.11 | 1.30±0.15 | 1.00±0.08 | 1.19±0.08 |
| Tibia | ♂ | 2.10±1.03(5) | 2.14±0.93(5) | 1.28±0.47 | 1.98±0.58 |
| | ♀ | 2.12±0.25 | 2.16±0.25 | 1.51±0.17 | 2.38±0.28 |
| Metatarsus | ♂ | 1.55±0.67(5) | 1.54±0.66(5) | 1.57±0.57 | 2.59±0.73 |
| | ♀ | 1.52±0.18 | 1.54±0.19 | 1.72±0.36 | 2.05±0.48 |
| Tarsus | ♂ | 0.88±0.37(5) | 0.89±0.36(4) | 0.61±0.15 | 0.74±0.19 |
| | ♀ | 0.89±0.09 | 0.91±0.09 | 0.68±0.06 | 0.87±0.14 |

Palp see figs. 26−27. Lengths of cymbium, tibia, patella, and femur are 0.85±0.17, 0.33±0.09, 0.44±0.14, 0.93±0.24, respectively.

Abdomen length 3.08±1.03, width 1.51±0.62, their ratio 2.07±0.55, from pale to dark brown.

Female (4). Carapace length 3.14±0.17, width 2.36±0.10, their ratio 1.33±0.05. Carapace reddish or reddish-greyish-brown. Cheliceres chestnut-coloured, legs dark cream-coloured or reddish. Leg armature : femur Ⅰ dorsally 1・1・2 (1・2・2, 1・2・3, 1・3・2) Ⅱ dorsally 1・3・3 (1・2・3), Ⅲ dorsally 1・1・3 (1・3・3, 1・2・3), Ⅳ dorsally 1・1・3 (1・2・3), tibia Ⅲ dorsally 2.2, ventrally 1.1 (2.1.1, 2.1), others as in male. Leg measurements see above.

Abdomen length 4.63±1.85, width 2.70±1.09, their ratio 1.72±0.29, from pale to dark brown. Epigyne see figs. 24−25.

**Distribution.** USSR−southern Far East. Korea. New for the USSR fauna.

### The "*propinqua*"-subgroup

Having the typical epigynal structure, the subgroup is characterized by the peculiarities of the palpal structure(tibial apophysis, embolus, see figs. 30−31, 34−36, 39−41).

The subgroup includes three species : vicariated *C. propinqua* L. Koch, 1879 (Siberia, northern Far East) and *C. subinteriecta* Strand, 1907 (southern Far East), as much as *C. pseudogermanica* Schenkel, 1936 (southern Far East).

### *Clubiona propinqua* L. Koch, 1879

(Figs. 30−33)

1879 *Clubiona propinqua* L.Koch, K.Svenska Vetensk.Akad.Handl., 16(5) : 90−92, Taf. Ⅲ, Fig.8 (1♂).

1935 *Clubiona strandiana* : SYTSHEVSKAJA : 98−99, fig.18 (♀).
1973 *Clubiona propinqua* : HOLM, Zool.Scripta, 2(3) : 104, figs. 106−108 (♂).

**Material.** Magadan Area : ♂♂ ♀♀ (ZMMU) Upper Kolyma, environs of Sibit-Tyellakh [7], 800−1400m, 1983−1988 ; leg.Yu.M.−1♀ (AIK) 1♀ (ZMMU) ibidem, Jack London Lake, 26.Ⅷ.1984 ; leg.K.E.&Yu.M.−1♀ (NHMW) 1♀ (SMF) 1♀ (ZMMU) 2♀ (BIN 39) 1♀ (AIK) ibidem. Kyunebellyakh Stream Basin, 1200m, S slope, under stones, 13. Ⅶ. 1987 ; leg.Yu.M.−1♂ 1♀ (ZMMU) Kontaktoviy Stream [10], 950m, S slope, rock debris, 11.Ⅷ.1986 ; leg.Yu.M.−1♂ (YuM) Butughychag Mt. [9], near source of Vakkhanka River, 900m, 12.Ⅷ.1988 : leg.Yu.M.−2♀ (YuM) environs of magadan [11], Solnechniy, 20.Ⅵ.1987 ; leg.Yu.M.−1♂ (AIK) 29 km N of Magadan, Dukcha Basin, 1000m, summit of a hill, shingle, 15.Ⅵ.1986 ; leg.Yu.M.−2♀ (ZMMU) Magadan, Nagaevskaya Bay, 25.Ⅷ.1987 ; leg.Yu.M.−Magadan Area, Chukotka ; 1♂ 1♀ (NHMW) 1♂ 1♀ (ZMMU) environs of Egvekinot [2], SE slope, high terrace, rock debris, 30.Ⅶ.1988 ; leg.Yu.M.−1♂ (YuM) upper stream of Vulvyveem River [4], mouth of Perevalniy Stream, 67°20′ N, 178°00′ E, 500m, 5.Ⅷ.1988 ; leg.Yu.M.−1♀ (YuM)ibidem, Ghitlenumkuum, 67°20′N, 178°00′E, 7.Ⅷ.1988 ; leg.Yu.M.−1♀ (YuM) lower istream of Vulvyveem River [4], environs of Yanranayghytghyn Lake, 66°50′N, 178°30′E, 15.Ⅷ.1988 ; leg.Yu.M.−Yakutia : 1♂ (YuM) Khametakh Lake, 10.Ⅷ.1932 : leg.SEMENOVICH.−1♂ (BIN 1) 232 km on road from Khandyga to Magadan [17], a foot of a hill, rock debris, 6.Ⅶ−6.Ⅷ.1985 : leg.A.Ba.−Kamchatka : 1♂ subad. 4♀ 3 juv. (syntypes of *C.strandiana*, ZMMU Ta-2627) Yayabi Mts. [22], Sredniy Kamchatskiy Mt. Ridge, Anauna River, under stones, 27.Ⅶ.1930 ; leg. V.P.

**MALE** (6). Carapace length 3.32±0.38, width 2.58±0.14, their ratio 1.32±0.03. Carapace reddish or dark cream-coloured. Cheliceres reddish or chestnut-coloured. Legs dark cream-coloured or reddish. leg armature : femur Ⅰ dorsally 1・2・3 (1・1・3), Ⅱ-Ⅲ dorsally 1・3・3 (1・2・3, 1・1・3), Ⅳ dorsally 1・1・3 (1・2・3, 1・3・3), patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ ventrally 2・2, Ⅱ ventrelly 2・2 (2・1), Ⅲ dorsally 2・2, ventrally 2・1・1 (1・1・1), Ⅳ dorsally 2・2, ventrally 2・1・1, metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2, ventrally 2・2 (2・1・2), Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|---|
| Femur | ♂ | 2.70±0.53 | 2.94±0.51 | 2.61±0.38 | 3.42±0.45 |
| | ♀ | 2.65±0.39 | 2.85±0.44 | 2.61±0.38 | 3.49±0.44 |
| Patella | ♂ | 1.48±0.26 | 1.54±0.25 | 1.24±0.19 | 1.38±0.23 |
| | ♀ | 1.52±0.21 | 1.54±0.26 | 1.31±0.41 | 1.52±0.16 |
| Tibia | ♂ | 2.69±0.47 | 2.85±0.51 | 2.11±0.28 | 2.91±0.64 |
| | ♀ | 2.31±0.35 | 2.48±0.37 | 1.96±0.29 | 2.91±0.42 |
| Metatarsus | ♂ | 1.91±0.29 | 2.04±0.36 | 2.35±0.43 | 2.74±0.57 |
| | ♀ | 1.60±0.27 | 1.72±0.25 | 2.18±0.31 | 2.63±0.55 |
| Tarsus | ♂ | 1.00±0.18 | 1.02±0.17 | 0.82±0.15 | 1.03±0.14 |
| | ♀ | 0.92±0.16 | 0.95±0.15 | 0.79±0.14 | 1.03±0.13 |



Palp see figs. 30−31. Lengths of cymbium, tibia, patella, and femur are 1.21±0.15, 0.42 ±0.13, 0.52±0.13, 1.02±0.09, respectively.

Abdomen length 4.37±0.71, width 2.23±0.48, their ratio 1.97±0.31, from pale brown to brown.

**FEMALE** (11). Carapace length 3.69±0.37, width 2.79±0.37, their ratio 1.33±0.20. Carapace reddish or reddish-greyish-brown. Cheliceres chestnut-coloured or reddish-greyish-brown. Legs dark cream-coloured or reddish. Leg armature : Ⅰ−Ⅱ dorsally 1・1・3 (1・1・2, 1・2・3), Ⅳ doraslly 1・1・3 (1・2・3), tibia Ⅲ dorsally 2・2, ventrally 2・1・1. (1・1, 2・1), metatarsus Ⅲ dorsally 2・1・2, laterally 1・2 (2・2), ventrally 2・1・2, others as in male. Leg measurements see above.

Abdomen length 4.46±1.13, width 2.69±0.72, their ratio 1.68±0.25, from pale to dark brown. Epigyne see figs. 32−33.

**Distribution.** Kamchatka (SYTSHEVSKAJA 1935). USSR-Siberia to the E of Enisey, northern Far East. Outside the USSR the species has not been found.

### *Clubiona subinteriecta* STRAND, 1907

(Figs. 34−38)

1907 *Clubiona subinteriecta* STRAND : 562 (♂, non ♀).
1909 *Clubiona subinteriecta* STRAND : 35−38 (♂, non ♀).

**Material** : Buryatia : 2♀ (ZMMU) Visim River, mouth of Baysa River, 20.Ⅷ.1983 ; leg. V.Zh.−Amur Area : 1♂ (syntype of *C. subinteriecta*, ZMH) Blagoveshchensk [41], "Blagowestschensk 1884. Cordes ded. 8.Ⅺ.1894".−1♀ (AIK) 2♀ (ZMMU) Arkhara distr., Kundur [38], 13.Ⅷ.1983 : [31] : 1♀ (NHMW) 2♀ (ZMMU) lowland plain forest with *Betula, Populus tremula, Fraxinus, Quercus,* etc., 100−150m, 5.Ⅵ.1987 ; leg.D. L.−1♀ (ZMMU) 150m, broad-leaved forest with *Pinus sibirica,* under bark, 22.Ⅵ.1987 ; leg.D.L.−1♀ (ZMMU) Bychikha, *Populus tremula* forest, on a bark, 2.Ⅹ.1988 ; leg. S.I.−2♂ (ZMMU) Bykova River, Kordon, ca.250m, 3.Ⅷ.1988 ; leg.S.I.−Sakhalin ; 2♀ (ZMMU) Makarov distr. Nituy River [50], 9−19.Ⅶ.1988 ; leg.A.B.−Maritime Province : 1♂ 1♀ (ZMMU) Ussuriyskiy Reserve [69], environs of Kamenushka, Komarovka River, under stones, 7.Ⅵ.1981 ; leg.G.B.−1♂ (AIK) ibidem, 3.Ⅵ.1981 ; leg.G.B.−3♀ (ZMMU) ibidem, environs of Kamenushka, 11.Ⅵ.1981 ; leg.G.B.−Maritime Province, Kedrovaya Pad Reserve [71] ; 1♀ (ZMMU) 10.Ⅷ.1976 ; leg.B.Z.−1♂ (BIN 13) Siniy Klyuch, 23.Ⅷ.1977 ; leg.B.Z.−1♀ (BIN 40) Gakkelevskiy Klyuch, Ⅹ.1977 ; leg.A.Yu BEREZANTSEV.−1♂ (ZMMU) bank of Kedrovaya River, on stones. Ⅵ.1978 ; leg.B.Z.

**Diagnosis.** The male differs from *C. propinqua* by the more rounded embolus. Females of

both species have no differences.

**Male** (8). Carapace length 3.39±0.51, width 2.44±0.06, their ratio 1.40±0.18. Carapace reddish or (pale) reddish-greyish-brown. Cheliceres chestnut-coloured or reddish. Legs reddish or dark cream-coloured. Leg armature : femur Ⅰ dorsally 1・1・2, Ⅱ dorsally 1・1・2 (1・2・2), Ⅲ dorsaly 1・1・3 (1・3・3) Ⅳ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1 (1・1・1, 2・1・1), Ⅳ dorsally 2・2, ventrally 2・1・1 (1・1・1), metatarsus Ⅰ－Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2(2・2), ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|---|
| Femur | ♂ | 2.76±0.47 | 2.84±0.51 | 2.39±0.46 | 3.15±0.50 |
| | ♀ | 2.70±0.65 | 2.79±0.67 | 2.43±0.57 | 3.26±0.67 |
| Patella | ♂ | 1.47±0.28 | 1.47±0.31 | 1.17±0.22 | 1.31±0.23 |
| | ♀ | 1.51±0.44 | 1.53±0.44 | 1.24±0.33 | 1.42±0.30 |
| Tibia | ♂ | 2.78±0.57 | 2.85±0.57 | 2.85±0.37 | 2.64±0.46 |
| | ♀ | 2.34±0.61 | 2.49±0.59(9) | 1.72±0.42 | 2.61±0.51 |
| Metatarsus | ♂ | 2.06±0.46 | 2.11±0.45 | 2.20±0.49 | 3.41±0.72 |
| | ♀ | 1.71±0.50 | 1.82±0.47(9) | 2.05±0.54 | 3.37±0.69 |
| Tarsus | ♂ | 1.10±0.28 | 1.12±0.22 | 0.79±0.17 | 1.97±0.19 |
| | ♀ | 1.01±0.23 | 1.04±0.24(9) | 0.77±0.17 | 0.98±0.14 |

Palp see figs. 34－36. Lengths of cymbium, tibia, patella, and femur are 1.19±0.17, 0.44±0.13, 0.56±0.15, and 1.21±0.24, respectively.

Abdomen length 4.17±0.97, width 2.23±0.43, their ratio 1.88±0.17, from dark cream-coloured to dark brown.

**Female** (10). Carapace length 3.67±0.93, width 2.71±0.70, their ratio 1.36±0.20. Carapace reddish, (pale)reddish-greyish-brown or dark brown. Cheliceres chestnut-coloured, legs dark cream-coloured or reddish. Leg armature : femur Ⅱ dorsally 1・1・2 (1・2・3, 1・2・2, 1・1・3), Ⅲ dorsally 1・2・3, (1・1・3, 1・3・3), tibia Ⅲ dorsally 2・2, ventrally 1・1 (2・1, 2・1・1), others as in male. Leg measurements see above.

Abdomen length 5.34±2.04, width 3.07±1.32, their ratio 1.75±0.31, from pale to dark brown. Epigyne see figs. 37－38.

**Distribution.** Amur Area : Blagoveshchensk (Strand 1907, 1909).

USSR－southern Far East.

**Remarks.** The female specimens from Buryatia and Sakhalin have been classified under *C. subinteriecta* conditionally, since the respective malles have hitherto not been found.

Sternbergs' (1988) reference to *C. phragmitis* deriving from the Furugelma Islans, S－Primorye, seems actually to belong to *C. subinteriecta,* but the pertinent material has unfortunately been unavailable for me.



### *Clubiona pseudogermanica* Schenkel, 1936

(Figs. 39－43)

1936 *Clubiona pseudogermanica* Schenkel, Ark.f.Zool., 29S(1) : 155－156, fig.53 (♂).
1982 *Clubiona propinqua* : Song : 101－102.
1982 *Clubiona propinqua* : Hu,Song : 56, fig.3 (♂).
1987 *Clubiona propinqua* : Hayashi : 35, figs. 3－11 (♂♀).
1987 *Clubiona salictum* : Namkung, Kim , Korean Arachmol., 3(1) : 24－26, figs. 2－5, 8－11 (♂, non ♀).
1990 *Clubiona propinqua* : Paik : 102－103, figs. 86－93 (♂).

**Material.** Khabarovsk Province : 1♀ (ZMMU) Amur River opposite of Khabarovsk [30], Zeleniy Ostrov, bush, 8－9.Ⅶ.1931 : leg. V.P.－Khabarovsk Province, Bolshekhekhtsyrskiy Reserve [31] : 1♂ 1♀ (BIN 41) 1♀ (DL) 1♂ 2♀ (ZMMU) *Betula* sparse stand with *Rhododendron,* 940m, litter, 8.Ⅵ.1987 : leg.D.L.－1♂ (AIK) *Picea, Abies* forest, boom, 9.Ⅵ－29. Ⅶ.1987 ; Leg. D.L. 1♀ (AIK) 1♀ (NHMW) 400m broadleaved-*Pinus sibirica* forest, litter, 10.Ⅵ.1987 : leg. D.L.－1♂ 1♀ (ZMMU) 1♂ (DL) 250m, ibidem, 22.Ⅵ. 1987 : leg. D.L.－Sakhalin : 1♀ (ZMMU) Okha distr., lower stream of Tengi River [43], 4－6.Ⅴ.1987 : leg.A.B.－1♂ (NHMW) ibidem 11－30.Ⅴ.1987 : leg.A.B.－1♂ (ZMMU) Okha distr., environs of Tengi River [43], 1－4.Ⅵ.1987 : leg.A.B.－1♂ 1♀ (AIK) Alexandrovsk [44] distr., environs of Mgachi, 29.Ⅵ－6.Ⅶ.1988 : leg.A.B.－1♂ (ZMMU) Tymovskoe [45] distr., Verkhnyaya Armuda, 28.Ⅵ.1988 : leg.A.B,－1♂ (SMF) Aniva [57] distr., 5 km E of Novoalexeevka, 10.Ⅵ.1985 :leg.A.B－1♀ (SMF) Aniva [57] distr., environs of Petropavlovskoe, 26.Ⅵ.1987 : ledg.A.B.－1♀ (ZMMU) environs of Aniva [57], 27.Ⅴ.1988 : leg.A.B.－1♂ 2♀(ZMMU) environs of Yuzhno-Sakhalinsk [55], Dolina Turistov, 17.Ⅹ.1987 : leg.A.B.－Kunashir : 1♀ (ZMMU) environs of Alekhino [60], 13－16.Ⅷ.1988 : leg.A.B.－Maritime Province : 1♂ 1♀(AIK) 1♂ 1♀ (ZMMU) 1♂ 1♀(ZLL) Chuguevka [68] distr., **Picea** forest, 26.Ⅷ.1974 : leg.?.－1♀ (ZMMU) Ussuriyskiy Reserve [69], 8.Ⅵ.1977 : leg.?－1♀ (ZMMU) Anuchino distr., 18 km N of Chernysheveka [67], coniferous-broadleaved forest, 23－20.Ⅶ.1984 : leg.V.B.

**Korea :** 1♀ (AIK) Uijongbu, Ⅰ－Ⅶ.1986 : leg.J.P.KIM.

**Diagnosis.** Both sexes differ from other representatives of the "*pallidula*"－group by the relatively small size : the male from *C. propinqua*-subinteriecta by the rounded and attenuating embolus, the female by the small first part of the spermathecae and location of the copulatory openings more distantly from the posterior margin of the epigyne.

**Male** (10). Carapace length 2.05±0.41(11), width 1.55±0.34(11), their ratio 1.33±0.15 (11). Carapace dark cream-coloured or reddish. Cheliceres reddish, rare dark cream-coloured, or pale reddish-greyish-brown. Legs dark cream-coloured. Leg armature : femur Ⅰ dorsally 1・1・3 (1・1・2, 1・1・1), Ⅱ dorsally 1・1・3 (1・1・2), Ⅲ－Ⅳ dorsally 1・1・3, patella Ⅲ－Ⅳ retrolaterally 1, tibia Ⅰ－Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1 (1・1・1, 1), Ⅳ dorsally 2・2, ventrally 1・1・1, metatarsus Ⅰ－Ⅱ ventrally

2, Ⅲ dorsally 2・1・2, laterally 1・2, ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|---|
| Femur | ♂ | 1.48±0.31(9) | 1.50±0.32 | 1.32±0.20 | 1.77±0.27 |
| | ♀ | 1.51±0.33 | 1.58±0.38 | 1.38±0.29 | 1.91±0.41 |
| Patella | ♂ | 0.78±0.15 | 1.63±0.10 | 0.74±0.12 | 1.31±0.23 |
| | ♀ | 0.82±0.19 | 0.83±0.20 | 0.71±0.16 | 0.83±0.19 |
| Tibia | ♂ | 1.29±0.17(9) | 1.33±0.20 | 0.95±0.15 | 1.43±0.16 |
| | ♀ | 1.22±0.28 | 1.27±0.28 | 0.93±0.21 | 1.51±0.34 |
| Metatarsus | ♂ | 0.97±0.15(9) | 0.98±0.10 | 1.13±0.12 | 1.79±0.28 |
| | ♀ | 0.89±0.20 | 0.93±0.20 | 1.12±0.24 | 1.87±0.43 |
| Tarsus | ♂ | 0.62±0.06 | 0.60±0.15 | 0.49±0.11 | 0.64±0.10 |
| | ♀ | 0.58±0.10 | 0.59±0.13 | 0.51±0.09 | 0.66±0.13 |

Palp see figs. 39−41. Lengths of cymbium, tibia, patella, and femur are 0.69±0.08, 0.27 ±0.03, 0.30±0.05, and 0.60±0.12, respectively.

Abdomen length 2.46±0.46(11), width 1.41±0.44(11), their ratio 1.76±0.35(11), from pale brown to brown.

**Female** (10). Carapace length 2.29±0.42, width 1.73±0.34, their ratio 1.33±0.61. Carapace and chelicaeres reddish, (pale) reddish-greyish-brown or dark cream-coloured. legs dark creamcoloured. Leg armature : femur Ⅰ−Ⅱ dorsally 1・1・2, tibia Ⅰ−Ⅱ ventrally 2・2(1・2), Ⅲ dorsally 2・2, ventrally 1・1. (1・1・1), others as in male. Leg measurements see above.

Abdomen length 3.22±1.23, width 2.14±1.02, their ratio 1.53±0.26, colouration as of male. Epigyne see figs. 42−43

**Distribution.** USSR−southern Far East. Japan, Korea : China : Liaoning, Hunnan, and Gansu Provinces (type locality : Song, personal comm.).

New for the USSR fauna.

**Remarks.** The figures of "*C. propinqua*" by Chinese, Japanese, and Korean authors (Hu, Song, 1982 : Hayashi, 1987 : Paik, 1990) confirm that their specimens belong actually to *C. pseudogermanica*. The synonymy of both species supposed by Song (1982) is wrong. The examining of the male specimen of *C. salictum*(Korea, determined by J.-P.Kim) confirms the synonymy of this species partly : only ♂) under "*C. propinqua*" (*C. pseudogermanica*) by Paik(1990).

### The "*reclusa*"-group

**Male.** Tibial apophysis strong, divided into three processes : the ventral one is harpoon-shaped. Tegulum with a strongly expanding apophysis bearing one or two sharp



teeth at tip. Embolus slender and curved, with the tip lying adjacent to tip of membraneous conductor at distal and of alveolus, sometimes beyond latter's limits. embolic base concealed by tegular apophysis, Conductor forms a separate piece.

**Female.** Epigynal plate covered by hairs, usually with transverse furrows. Copulatory openings slit-like, indistinct, located in posterior margin of epigynal plate. Copulatory tubes short, extening anterolaterad or laterad. Spermatheca in two kidney-shaped parts. Atrium distant from spermatheca, located in posterior part of epigyne. Atrio-spermathecal tube long, directed anteromesad.

The group of Holarctic distribution, includes two species in the Soviet Far East.

### *Clubiona interjecta* L. Koch, 1879

1879 *Clubiona interjecta* L.Koch, K.Svenska Vetensk. Akad. Handl., 16(5) : 89, Taf.Ⅲ, Fig.7 (♂♀).

1906 *Clubiona subinteriecta* [n.nud.] Strand, Abh. Naturforsch. Ges. Gorlitz, 25(1) : fig. 22 (♀).

1907 *Clubiona subinteriecta* Strand : 562 (♀, non ♂).

1909 *Clubiona subinteriecta* Strand : 35−38 (♀, non ♂).

1973 *Clubiona interjecta* : Holm, Zool. Scr., 2(3) : 104, figs. 102−105 (♂♀).

**Material.** Magadan Area ; ♂♂ ♀♀ (ZMMU, YuM) Upper Kolyma, environs of Sibit-Tyellakn [7], 1983−1987 : leg.Yu.M.−1♂ 1♀ (AIK) 1♂ (ZMMU) road from Ust−Omchugh to Vetrenniy [8], bank of Vakkhanka River, forest of *Populus* and *Chosenia*, 16.Ⅶ.1983 : leg. Yu.M.−1♂ 4♀ (ZMMU) environs of Sibit−Tyellakh [7], Jack London Lake, circular moraine, *Larix* stand with lichenes, under bark, 6.Ⅸ.1985 : leg.Yu.M. −Kamchatka : 1♂ (ZMMU Ta−2631) Kamchatka River, kresty [20], Ⅷ.1930 : leg.et det.V.P.−1♂ (ZMMU Ta−2631) Kamchatka River, below the mouth of Kryuki River [20], 9.Ⅷ.1930 : leg.et det.V.P.−1♂ (ZMMU) Ta−2634) Kamchatka River, below the mouth of Belaya River [20], grass, 13.Ⅷ.1930 : leg.V.P.−1♂ (ZMMU Ta−2630) Kamchatka River, ibidem, forest, on *Cacalia hastata*, 17.Ⅷ.1930 : leg.et det.V.P.−4♂8♀ (ZMMU Ta−2622) Lake Nerpichye [19], 15−26.Ⅸ.1930 : leg.et det.V.P.−Amur Area : 1♀ (syntype of *C. subinteriecta*, ZMH) Blagoveshchensk [41], "Blagowestschensk 1884. Cordes ded.8.Ⅺ.1984".−Khabarovsk Province : 1♂ (NHMW) Okhotsk [24], 26.Ⅷ.1985 : leg.V.Zh.−1♀ (ZMMU) Amur River opposite of Khabarovsk [30], left bank, under bark, k, 15.Ⅵ.1931 : leg.V.P.−3♀ (ZMMU) ibidem, grass, 15.17.Ⅵ.1931 : leg.V.P.−1♀ (ZMMU) Amur River opposite of Khabarovsk [30], Zeleniy ostrov, 22.Ⅵ.1931 : leg.V.P. −1♂ 1♀ (ZMMU) ibidem, 26.Ⅵ.1931 : leg.V.P.−2♀ (ZMMU) ibidem, 29.Ⅵ.1931 : leg. V.P.−1♀ (ZMMU) ibidem, bush, 14.Ⅶ.1931 : leg.V.P.−1♀ (ZMMU) Khor River, environs of Khor [32], bush, 1.Ⅷ.1931 : leg.V.P.−1♀ (AIK) Jewish Autonomous Region, Leninskoe distr., Amur River, Rybachiy Isl. [34], 240 km upstream from Khabarovsk, 45m, grassland with *Artemisia*, 18.Ⅵ.1988 : leg.D.K.−Sakhalin : 1♂ (AIK) 1♂ (NHMW)

Okha distr., lower stream of Tengi River [43], 6−10.Ⅴ.1987 : leg.A.B.−1♀ (SMF) Tengi River [43], 1−4.Ⅵ.1987 : leg.A.B.−1♂ 1♀ (NHMW) 1♀ (AIK) 3♀ (ZMMU) Poronaysk [49] distr., Vitnitsa River, 27.Ⅹ.1987 : leg.A.B.−1♂ 8♀ (ZMMU) 1♂ 1♀ (ZIL) Poronaysk distr., midstream of Rukutama River [48], 7−16.Ⅵ.1988 : leg.A.B. −1♂ (AIK) upper stream of Rukutama River [48], litter, 17−27.Ⅳ.1988 : leg.A.B.−1♂ (SMF) Dolinsk [54] distr., ca 5km E of Pokrovka, 13−14.Ⅷ.1986 : leg.A.B.−1♂ (BIN 42) Dolinsk distr., Pokrovka, 10−17.Ⅶ.1987 : leg.A.B−1♀ (BIN 43) Aniva [57] distr., environs of Petropavlovskoe, Lyuroga River, 26.Ⅵ.1987 : leg.A.B.−Maritime Province : 1♀ (BIN 10) midstream of Bikin River [61], 1−5.Ⅵ.1977 : leg.Yu.Sh.

**Distribution.** Kamchatk (Sytshevskaja 1935). USSR−Siberia (to E of Enisey), Tuva, Transbaicalia, Far East (except for southern Primorye). Beyond the USSR, this species has not been discovered, but may be found in Mongolia.

### *Clubiona kulczynskii* Lessert, 1905

1935 *Clubiona kulczynskii* : Sytshevskaja : 97−98, fig.13(♀).
1965 *Clubiona kulczynskii* : Wiehle : Abb. 92−95 (♂♀).
1971 *Clubiona kulczynskii* : Tyshchenko : 128, 133.
1982 *Clubiona kulczynskii* : Dondale, Redner : 85−87, figs.158−161(♂♀), map 23.

**Material.** Magadan Area : ♂♂ ♀♀ (ZMMU) Upper Kolyma, environs of Sibit-Tyellakn [7], 1983−1987 : leg.Yu.M.−1♀ (ZMMU) ibidem, Detrin River, ca.50km upstream of its mouth, Bakkhanka Stream, forest of *Populus* and *Chosenia,* litter, 14.Ⅷ.1984 : leg. K.E.−1♂ (ZMMU) 56th km of road from Ust-Omchugh to Vetrenniy [8], bank of Detrin River, *Salix* forest with *Chosenia,* 27.Ⅷ.1985 : leg.Yu.M.−1♂ (AIK) 1♂ (ZMMU) ibidem, *Larix* forest, 27,Ⅷ.1985 : leg Yu.M.−1♀ (ZMMU) 10km upstream of Vetrenniy [8], Alnus forest with Shphagnm, neara-stream, 5.Ⅷ.1984 ; leg.K.E.−1♂ (AIK) road from Ust−Omchug to Vetrenniy [8], Vakkhanka River, 6−16.Ⅶ.1983 : leg.A.A.−1♀ (YuM) Kontaktoviy Stream [10], 8−18.Ⅷ.1987 : leg.S.B.−1♀ (AIK) 1♀ (NHMW) environs of Magadan, Talon [12], 9.Ⅷ.1986 : leg.G.Ch.−3♀ (ZMMU) environs of Magadan [11], Snezhnaya Dolina, 12−14.Ⅸ.1986 : leg.Yu.M.−1♂ (NHMW) 23km N of Magadan [11], floodland of Dukcha River, gramineous grass-land. 24.Ⅵ.1985 : leg.Yu.M. −1♀ (YuM) 29km N of Magadan [11], 4.Ⅴ.1988 : leg.Yu.M.−1♂ 1♀ (YuM) 15km E of Magadan [11], Gertner Bay, environs of Nyuklya, 3.Ⅴ.1986 : leg.Yu.M.−1♀ (ZMMU) ibidem, 11.Ⅵ.1987 : leg.Yu.M.−1♂ (ZMMU) midstream of Chelomdzha River [14], 5−10.Ⅷ.1985 : leg.Yu.M.−♂♂ ♀♀ (YuM) ibidem, 1983−1987 : leg.N.D.−Yakutia : 1♀ (YuM) Chona River near Levyazhya River, 18.Ⅵ.1926 : leg.M.T.−1♀ (YuM) upper stream of Amga River, Kharyyalakh Lake, 6.Ⅶ.1985 : leg.N.V.−Kamchatka : 1♀ (ZMMU) Kozyrevsk [21], a lake, 16.Ⅶ.1930 : leg.et det.V.P.−2♀ (ZMMU Ta-2635, 2636) environs of Kozyrevsk [21], on *Calamagrostis* and *Epilobium angustifolium,* 23.Ⅶ.1930 : leg.et det.V.P.−1♀ (ZMMU Ta−2637) ibidem, grass, 29.Ⅶ.1930 : leg.et det.V.P.−3♀ (ZMMU Ta−2623) Kamchatka River downstream of Ushki [21], mixed forest, bush, Ⅷ.1930 : leg.et det.V.P.−1♂ (ZMMU Ta−4488) Kamchatka River, downstream of Belaya River mouth [20], 13.Ⅷ.1930 : leg.et det.V.P.−2♀ (ZMMU Ta-2624) ibidem, bush, 17.Ⅷ.1930 : leg.et det.V.P.−1♂ (ZMMU Ta−2620) Kamchatka River, Dolgiy Plyos [20], bird-cherry tree, 29.Ⅷ.1930 : leg.et det.V.P.−1♂ (ZMMU Ta−2622) Nerpichye Lake [19], multiherbaceous glassland, 19.Ⅸ.1930 : leg.et det.V.P.−1♂ (ZMMU) Petropavlovsk [23], 1.Ⅵ.1986 : leg.Yu.M.−Khabarovsk Province : 1♀ (ZMMU) Okhotsk distr., Ulya Basin, Gyrbykan River (25), *Larix* with dwarf *Betula* stand, 20.Ⅷ−15.Ⅸ.1986 : leg.I.S.−Sakhalin : 1♀ (ZMMU) Okha distr., environs of Tungor, 21.Ⅸ.1986 : leg.A. B.

**Distribution.** Kamchatka (Sytshevskata, 1935). USSR−European part, N−Ural, E−Kazakhstan, Siberia, Tuva, Tuva, Transbaicalia, N.−Far East. Holarctics.



### The "*caerulescens*" - group

**Male.** Tibial apophysis strong, huge, with three processes, middle one bifurcate near tip. Tegular apophysis absent. Embolus begins from distal half of bulb, ends in proximal half.

**Female.** Epigyne strongly expanding posteriad above epigastric fissure, hanging over it (2/5ths of epigynal length located behind the fissure). Copulatory tubes directed anteromesad, then anteriad. Spermatheca in two parts. Atrium borders spermatheca. Posterior part of epigynal plate strongly sclerotized correspondingly to the huge volume of male tibial apophysis.

A single species with Palaearctic distribution :

### *Clubiona caerulescens* L. Koch, 1866

1965 *Clubiona caerulescens* : Wiehle : Abb. 106−109 (♂♀).
1968 *Clubiona caerulescens* : Azheganova : 130, 132, figs. 299, 313 (♂♀).
1971 *Clubiona caerulescens* : Tyshchenko : 128, 132, figs. 315, 324 (♂♀).

**Material.** Magadan Area : 1♀ (ZMMU) 40km NW of Talon [12], Magadanskiy Reserve, 14−20.Ⅷ.1985 : leg.A.L.−Khabarovsk Province : 1♂ (DL) Bolshekhekhtsyrsiy Reserve [31], 350−400m, *Pinus sibirica*-broadleaved forest, 24.Ⅵ.1987 : leg.D.L−Sakhalin : 1♀ (AIK) Aniva [57] distr. 3−5 km E of Novoalexandrovka, 29.Ⅸ.1988 : leg.A.B. −1♂ (ZMMU) Aniva distr., 7−8 km E of Novoalexandrovsk [55], 28.Ⅴ.1988 : leg.A.B. −1♀ (ZMMU) environs of Yuzhno−Sakhalinsk [55], Dolina Turistov, 24.Ⅵ.1987 : leg. A.B.

**Distribution.** USSR−european part, Caucasus, Ural, N−& E−Kazakhstan, Siberia, Far East (here as a rare species : absent in Primorye). Palaearctics.

**Remark.** S. Saito's (1934) record in Sakhalin actually belongs to *C. kurilensis.*

### The "*chabarovi*" - group

**Male.** Tibial apophysis huge, but slightly sclerotized, with a strong inner depression swollen outside, consists of two processes. Tegular apophysis conceals embolic base. Embolus directed distad, expanding beyond alveolum.

**Female.** Epigyne strongly expanding posteriad above epigastric fissure. Posterior part of epigyne non-sclerotized. Copulatory openings unite in a groove in the posterior part of epigyne. Copulatory tubes directed anteriad, parallel, then extending anterolaterad. Spermatheca in one part. Huge non-sclerotized depressions for the fixation of the male tibial apophysis during mating are located in the anterior part of the epigynal plat.

Includes a single species :

### *Clubiona chabarovi* Michailov, sp. nov.

(Figs. 44−49)

*Holotype* : 1♂ (ZMMU Ta−4567) Khabarovsk Province, Bolshekhekhtsyrskiy Reserve [31], *Pinus sibirica*−broadleaved forest, 200m, litter, 11.Ⅵ.1987 : leg.D.L.

*Paratypes* : Khabarovsk Province, Bolshekhekhtsyrskiy Reserve [31] : 1♂ (AIK) 1♂ (BIN 44) 1♂ (ZMMU) ibidem.−1♀ (AIK) 1♀ (BIN 45) 1♀ (ZMMU) 940m, *Betula* sparse stand with *Rhododendron,* litter, 8.Ⅵ.1987 : leg.D.L.−2♀ (ZMMU) *Picea, Abies* forest, 600m, 9.Ⅵ−29.Ⅶ.1987 : leg.D.L.

**Diagnosis.** The male differs from other congeners by the voluminous, non-sclerotized tibial apophysis with a strong inner depression. The female differs by the epigyne strongly expanding posteriad combined with huge depressions in its anterior part.

**Male** (4). Carapace length 2.88±0.33, width 1.98±0.21, their ratio 1.46±0.17. Carapace, cheliceres, and Legs dark cream-coloured. Leg armature : femur Ⅰ-Ⅱ dorsally 1・1・3 (1・1・2), Ⅲ-Ⅳ dorsally 1・1・3, patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1・1 (2・1), Ⅳ dorsally 2・2, ventrally 2・1・1 (1.1.1), metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2, ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|---|
| Femur | ♂ | 2.55±0.30 | 2.57±0.26 | 2.20±0.28 | 3.04±0.30 |
| | ♀ | 2.23±0.25 | 2.40±0.28 | 2.05±0.20 | 2.74±0.24 |
| Patella | ♂ | 1.18±0.14 | 1.22±0.13 | 0.99±0.13 | 1.15±0.11 |
| | ♀ | 1.21±0.08 | 1.22±0.06 | 1.02±0.05 | 1.20±0.12 |
| Tibia | ♂ | 2.48±0.30 | 2.60±0.24 | 1.75±0.12 | 2.59±0.21 |
| | ♀ | 1.89±0.12 | 2.01±0.14 | 1.48±0.13 | 2.22±0.51 |
| Metatarsus | ♂ | 1.70±0.04 | 1.77±0.13 | 2.00±0.16 | 3.28±0.44 |
| | ♀ | 1.38±0.12 | 1.44±0.14 | 1.74±0.36 | 2.67±0.18 |
| Tarsus | ♂ | 1.03±0.08 | 1.04±0.07 | 1.75±0.04 | 0.92±0.08 |
| | ♀ | 0.87±0.12 | 0.94±0.30 | 0.71±0.08 | 0.90±0.15 |



Palp see figs. 44−47. Lengths of cymbium, tibia, patella, and femur are 1.08±0.09, 0.42±0.10, 0.53±0.05, 0.95±0.07, respectively.

**Female**(5). Carapace length 3.08±0.26, width 2.38±0.11, their ratio 1.29±0.12. Carapace reddish, cheliceres reddish-greyish-brown or chestnut-coloured, legs dark cream-coloured. Leg armature : femur Ⅰ-Ⅱ dorsally 1・1・2, tibia Ⅲ dorsally 2・2, ventrally 1・1 (1, 1・1・1) Ⅳ dorsally 2・2, ventrally 1・1・1, metatarsus Ⅲ dorsally 2・1・2, laterally 2・1 (2・2), ventrally 2・2, others as in male. Leg measurements see above.

Abdomen length 4.32±0.47, width 2.85±0.31, their ratio 1.52±0.16, brown or dark brown. Epigyne see figs. 48−49.

**Distribution.** USSR−Bolshoy Khekhtsyr Mt. Ridge.

**Etymology.** The species is dedicated to the famous Russian pioneer and traveller of 17th century, E. P. Chabarov, which opened up East Siberia and Amur Region.

*Clubiona (Clubiona) incertae sedis.*

### *Clubiona wolchongsensis* Paik, 1990

(Figs. 50−51)

1990 *Clubiona wolchongsensis* Paik : 99−100, figs. 66−73 (♀).

**Material.** Khabarovsk Province : 1♀ (ZMMU) Amur River, Nizhnespasskoe [33], 53 km upstream of Khabarovsk, 35m, *Quercus* forest with *Polygonatum,* 15.Ⅵ.1988 : leg.D.K. −1♀ (BIN 46) Jewish Autonomous Region, Oktyabrskiy distr., Amur Area, Sredniy Isl. [35], 353 km upstream of Khabarovsk, 50m *Quercus* forest, 20.Ⅵ.1988 : leg.D.K.−Maritime Province : 1♀ (ZMMU) midstream of Bikin River [61], 1−5.Ⅵ.1977 : leg.Yu.Sh. −1♀ (ZMMU) Khanka distr., Astrakhanka [64], 8.Ⅸ.1956 : leg.Ya.S. & I.L.

**Diagnosis.** The female differs from other congeners by the strongly sclerotized genitalia, discoid atria, and curved tubular spermathecae.

**Female** (4). Carapace length 2.55±0.14, width 1.89±0.13, their ratio 1.35±0.09. Carapace reddish, reddish-greyish-brow nor dark cream-coloured. Cheliceres chestnut-coloured, legs dark cream-coloured or reddish. Leg arnature : femur Ⅰ-Ⅱ dorsally 1・1・2, Ⅲ-Ⅳ dorsally 1・1・3, Patella, Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1, Ⅳ dorsally 2・2, ventrally 1・1・1, metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2 (2・2), laterally 1・2 (2・2), ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|
| Femur | 1.61±0.25 | 1.64±0.16 | 1.44±0.20 | 1.95±0.38 |
| Patella | 0.94±0.13 | 0.95±0.07 | 0.78±0.09 | 0.95±0.08 |
| Tibia | 1.30±0.11 | 1.38±0.11 | 1.01±0.05 | 1.63±0.15 |
| Metatarsus | 0.99±0.13 | 1.00±0.07 | 1.21±0.10 | 2.09±0.21 |
| Tarsus | 0.65±0.04 | 0.68±0.05 | 0.51±0.05 | 0.67±0.06 |

Abdomen length 4.28±1.43, width 2.56±0.43, their ratio 1.66±0.42, from pale to dark brown. Epigyne see figs. 50−51.

Male unknown.

**Distribution.** Southern Far East. Korea.

New for the USSR fauna.

**Remarks.** If we consider the small apophysis on the copulatory tube as the first part of the spermatheca, the main spermatheca will become the second part.

### *Clubiona zacharovi* Michailov, sp. nov.

(Figs. 52−53)

*Holotype*: 1♂ (ZMMU Ta−4568) Maritime Province, Kedrovaya Pad Reserve [71], plain broadleaved forest, on a soil, 9.Ⅵ.1976 : leg.B.Z.

*Paratypes* : 1♂ (AIK) ibidem, *Alnus* forest, 24.Ⅵ.1976 : leg.B.Z.−1♂ (ZMMU) ibidem, 3.Ⅷ.1976 : leg.B.Z.

**Diagnosis.** The male resembles the "*obesa*"−group by the structure of the palp but differs by the more simple tibial apophysis with two tips.

Male (3). Carapace length 3.50−3.85, width 2.35−2.80, their ratio 1.35−1.57. Carapace reddish, yellowish-greyish-brownish-coloured or pale reddish-greyish-brown. Cheliceres chestnut-coloured or yellowish-greyish-brownish-coloured. Legs dark cream-coloured. Leg armature : femur Ⅰ-Ⅱ dorsally 1・1・3, patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1・1 (2・1, 1・1, 2・1・1) Ⅳ dorsally 2・2, ventrally 2・1・1, metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2 (2・2), ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|
| Femur | 3.40−3.88 | 3.50−3.88 | 2.80−3.25 | 3.73−4.00 |
| Patella | 1.55−1.85 | 1.58−1.80 | 1.23−1.40 | 1.35−1.48 |
| Tibia | 3.68−4.20 | 3.80−4.25 | 2.23−2.43 | 3.28−3.45 |
| Metatarsus | 2.78−3.08 | 2.95−3.18 | 2.75−3.13 | 4.56−4.63 |
| Tarsus | 1.58−1.70 | 1.50−1.70 | 0.90−1.03 | 1.15−1.38 |

Palp see figs. 52−53. Lengths of cymbium, tibia, patella, and femur are 1.33−1.38, 0.50 −0.58, 0.55−0.65, 1.15−1.43, respectively.

Abdomen length 4.15−4.50, width 2.00−2.15, their ratio 2.02−2.25, dark brown or yellowish-greyish-brownish-coloured.

Female unknown.

**Distribution.** USSR−S Far East. May be found in NE China and Korea.

**Etymology.** The species is dedicated to the collector, entomologist, Boris P. Zaharov (Novosibirsk, formerly Vladivostok).



### *Clubiona paiki* Michailov, sp. nov.

(Figs. 54−56)

*Holotype* : 1♀ (ZMMU Ta−4569) Khabarovsk Province, Bolshkhekhtsyrskiy Reserve [31], 200−300m, hazelnut forest, litter, 7.Ⅵ.1987 : leg.D.L.

*Paratypes* : 1♀ (BIN) ibidem.−1♀ (ZMMU) ibidem, 350−400m, *Pinus sibirica*-broadleaved forest, 24.Ⅵ.1987 : leg.D.L.

**Diagnosis.** The female differs from other *Clubiona* species by the great distance between both tubular spermathecae.

Female (2). Carapace length 2.25−2.75, width 1.65, their ratio 1.36−1.67. Carapace and cheliceres reddish or dark cream-coloured, legs dark cream-coloured. Leg armature : femur Ⅰ-Ⅱ dorsally 1・1・2, Ⅲ-Ⅳ dorsally 1・1・3, patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1.1 Ⅳ dorsally 2・2, ventrally 1・1・1, metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2 (2・2), ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|
| Femur | 1.48−1.65 | 1.55−1.75 | 1.40−1.60 | 2.20−2.30 |
| Patella | 0.80−0.88 | 0.83−0.88 | 0.70−0.85 | 0.83−0.98 |
| Tibia | 1.25−1.43 | 1.23−1.43 | 0.95−1.08 | 1.60−1.83 |
| Metatarsus | 0.90−1.00 | 0.90−1.08 | 1.15−1.30 | 2.03−2.25 |
| Tarsus | 0.55−0.65 | 0.58−0.68 | 0.50 | 0.58−0.65 |

Abdomen length 2.70−2.95, width 1.65−1.09, their ratio 1.55−1.64, dark brown or tobacco brown. Epigyne see figs. 54−56.

Male unknown.

**Distribution.** USSR Far East : Bolshoy Khekhtsyr.

**Remark.** The structure of the epigyne has been investigated by me but partially. The location of the beginning of the lateral spermathecae remains obscure.

**Etymology.** The species is dedicated to the famous Korean arachnologist, Prof. Dr. K. Y. Paik.

### *Clubiona lyubarskii* Michailov, sp. nov.

(Figs. 57−59)

*Holotype*: 1♀ (ZMMU Ta−4570) Kunashir, Mendeleevo-Okeanskaya-Sernovodsk [59], 27−28.Ⅵ.1985 : leg.G.L.

*Paratype*: 1♀ (ZMMU) Kunashir, Cape Ivanovskiy, 5−7.Ⅶ.1989 : leg.A.Ba.

**Diagnosis.** The female differs from other *Clubiona* spesies by the epigyne expanding posteriad beyond the epigastric fissure combined with the large tubular spermathecae.

**Female** (1). Carapace length 3.75, width 2.10, their ratio 1.79. Carapace reddish, che-

liceres chestnut-coloured, legs dark cream-coloured. Leg armature : femur Ⅰ-Ⅱ dorsally 1・1・2 Ⅲ-Ⅳ dorsally 1・1・3, patella Ⅲ-Ⅳ retrolaterally 1, tibia Ⅰ-Ⅱ ventrally 2・2, Ⅲ dorsally 2・2, ventrally 1・1(1), Ⅳ dorsally 2・2, ventrally 1・1・1, metatarsus Ⅰ-Ⅱ ventrally 2, Ⅲ dorsally 2・1・2, laterally 1・2, ventrally 2・2, Ⅳ dorsally 2・1・2, laterally 2・2, ventrally 2・1・2. Leg measurements :

| | Ⅰ | Ⅱ | Ⅲ | Ⅳ |
|---|---|---|---|---|
| Femur | 2.38 | 2.45 | 2.13 | 2.88 |
| Patella | 1.20 | 1.20 | 1.05 | 1.20 |
| Tibia | 1.90 | 2.03 | 1.45 | 2.25 |
| Metatarsus | 1.38 | 1.50 | 1.83 | 2.78 |
| Tarsus | 0.85 | 0.90 | 0.68 | 0.85 |

Abdomen length 4.55, width 3.05, their ratio 1.49, brown. Epigyne see figs. 57−59.

Male unknown.

**Distribution.** USSR−Kunashir.

**Etymology.** The species is dedicated to my colleague and friend, coleoptenologist G. Y. Lyubarskiy (born 1959).

## Additions to the Part 1

**The map**

In the legends to the map (p.167) some localities are absent : **Sakhalin :** 56−Korsakov, 57−Aniva : from **Kunashir :** 58−Yuzhnokurilsk, 59−Mendeleevo /Sernovodsk /Stolbchatiy Cape.

### *Clubional japonica* L. Koch, 1878

1990 *Clubiona coreana* Paik : 89−91, figs. 1−15 (♂♀) syn. nov.

The figures of *C. coreana* in the original description and the figures of *C. japonica* in Part 1 (Mikhailov 1990, figs. 1−6) are identical. Unfortunately the comparative specimens of *C. japonica* investigated by Dr. K.Y.Paik were actually *C. flavipes* (Saito, 1939).

### *Clubiona flavipes* (Saito, 1939)

1987 *Clubiona japonica* : Hayashi : 33 (♂).

The comparative specimens of "*C. japonica*" from sent Japan by Dr.T. Hayashi to Dr. K. Y. Paik undoubtedly belongs to *C. flavipes* (see also Mikhailov 1990, p.143).

### *Clubiona kimyongkii* Paik, 1990

1990 *Clubiona kimyongkii* Paik : 98−99, figs 59−65 (♀).

1990 *Clubiona ussurica* Michailov : 161−162, figs. 52−53, 58−60 (♂♀) syn.nov.



The figures of both original descriptions are identical, but in the issue of Korean Arachnalogy my description is located after the paper of Dr. K.Y. Paik so I synonymyze my species under *C. kimyongkii*.

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## LEGENDS FOR THE FIGURES

**Figs. 1—7. *Clubiona irinae* MICHAILOV, sp. nov.** 1—4. right male palp, 5. epigyne, 6. vulva, 7. spermathecae, 1.7. ventral, 2. lateral, 3. dorsolateral, 4. inner view.

Figs. 8—16. ***Clubiona ezoensis* HAYASHI.** 8—14. right male palp, 15. epigyne, 16. vulva, 8—9. ventral, 10—11. ventrolateral, 12—13. lateral, 14. inner view.

Figs. 17—21. ***Clubiona odesanensis* PAIK.** right male palp. 17. ventral, 18. lateral, 19. ventrolatero-lateral, 20—21. inner view.

Figs. 22—23. ***Clubiona langei* MICHAILOV. sp. nov,** ♀ paratype. 22. epigyne, 23. vulva.

Figs. 24—29. ***Clubiona sopaikensis* PAIK.** 24. epigyne, 25. lateral, 28. ventral, 29. inner view.

Figs. 30—33. ***Clubiona propinqua* L.KOCH.** 30—31. right male palp, ventral view, 32. epigyne, 33. vulva.

Figs. 34—38. ***Clubiona subinteriecta* STRAND.** 34—36. right male pale, 37. epigyne, 38. vulva, 34. ventral, 35. lateral, 36. ventrolateral view.

Figs. 39—43. ***Clubiona pseudogermanica* SCHENKEL, 1936.** 39—41. right male palp, 42. epigyne, 43. vulva, 39. ventral, 40. lateral, 41. ventrolateral view.

Figs. 44—49. ***Clubiona chabarovi* MICHAILOV, sp. nov.,** ♂♀ paratypes. 44—47. right male palp, 48. epigyne, 49. vulva, 44—45. ventral, 46—47. lateral view.

Figs. 50—51. ***Clubiona wolchongsensis* PAIK.** 50. epigyne, 51. vulva.

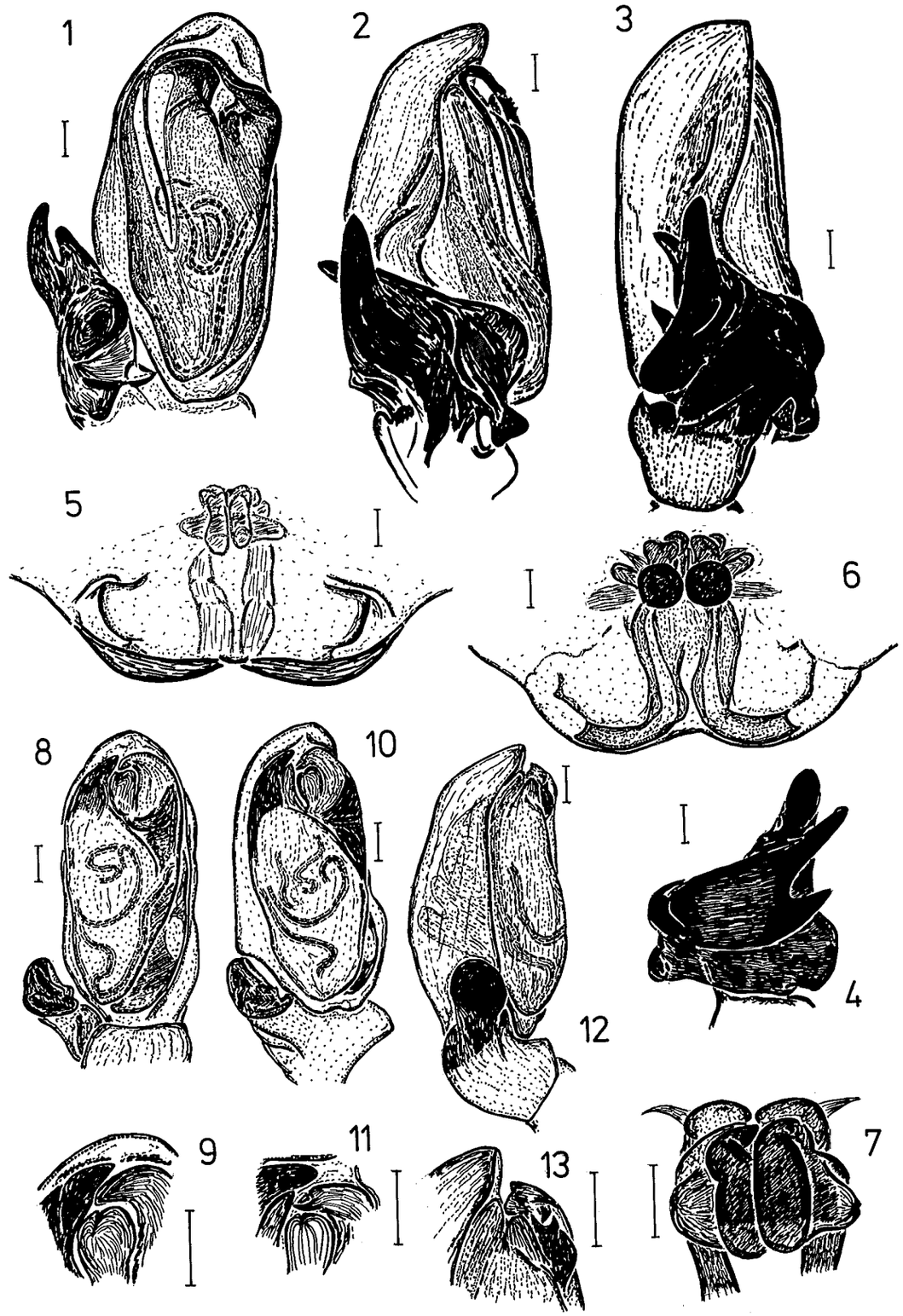
Figs. 52—53. ***Clubiona zacharovi* MICHAILOV, sp. nov.,** ♂ paratype. Right male palp, 52. ventral, 53. lateral view.

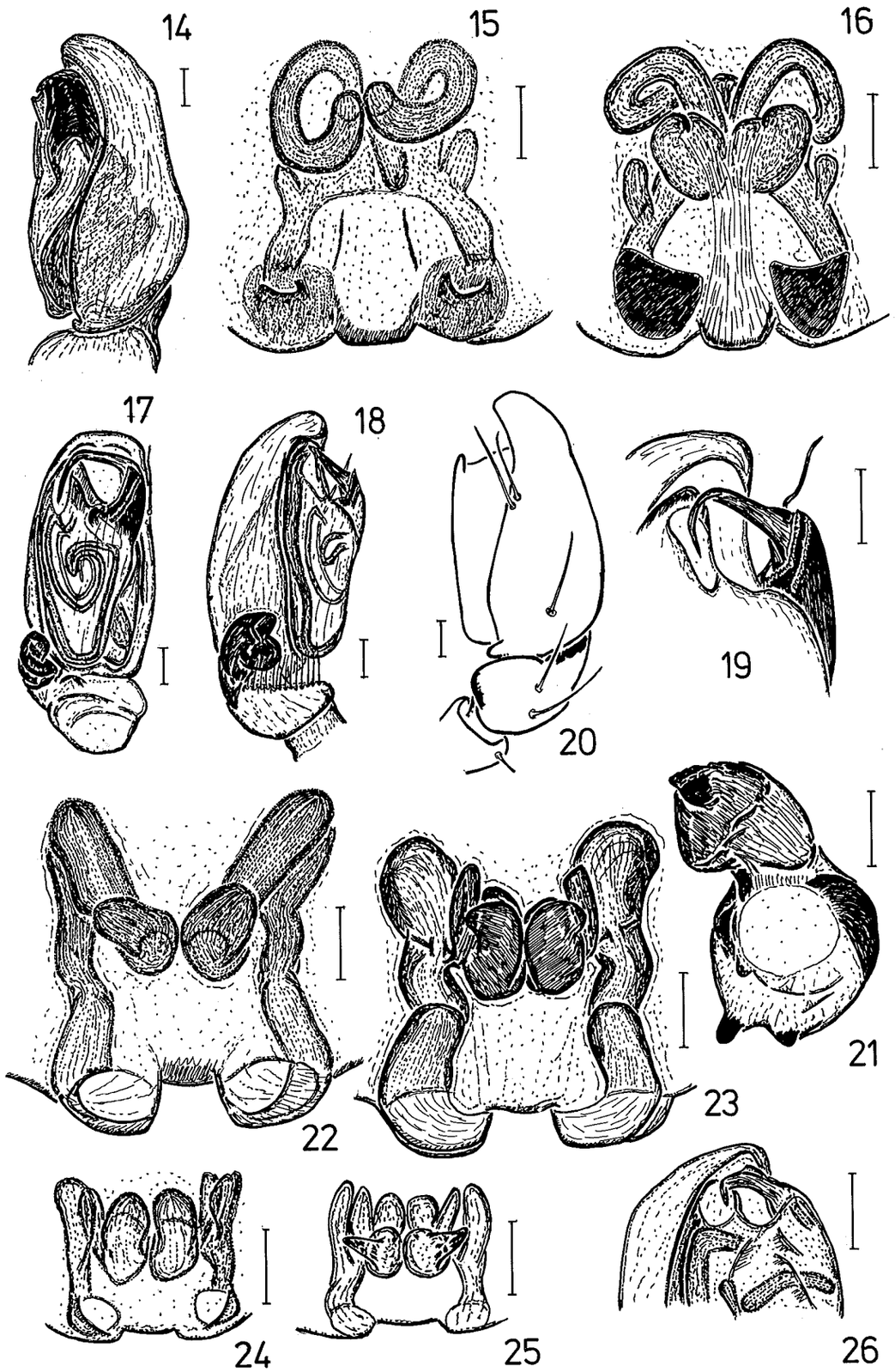
Figs. 54—56. ***Clubiona paiki* MICHAILOV, sp. nov.,** ♀ paratype. 54. epigyne, 55—56. vulva, 56. epigyne, 55—56. vulva, 56. back view.

Figs. 57—59. ***Clubiona lyubarskii* MICHAILOV, sp. nov.,** ♀ holotype. 57. epigyne, 58—59. vulva, 59. ventrolateral view.

* (Figs. 1—59. Scale lines=0.14mm)



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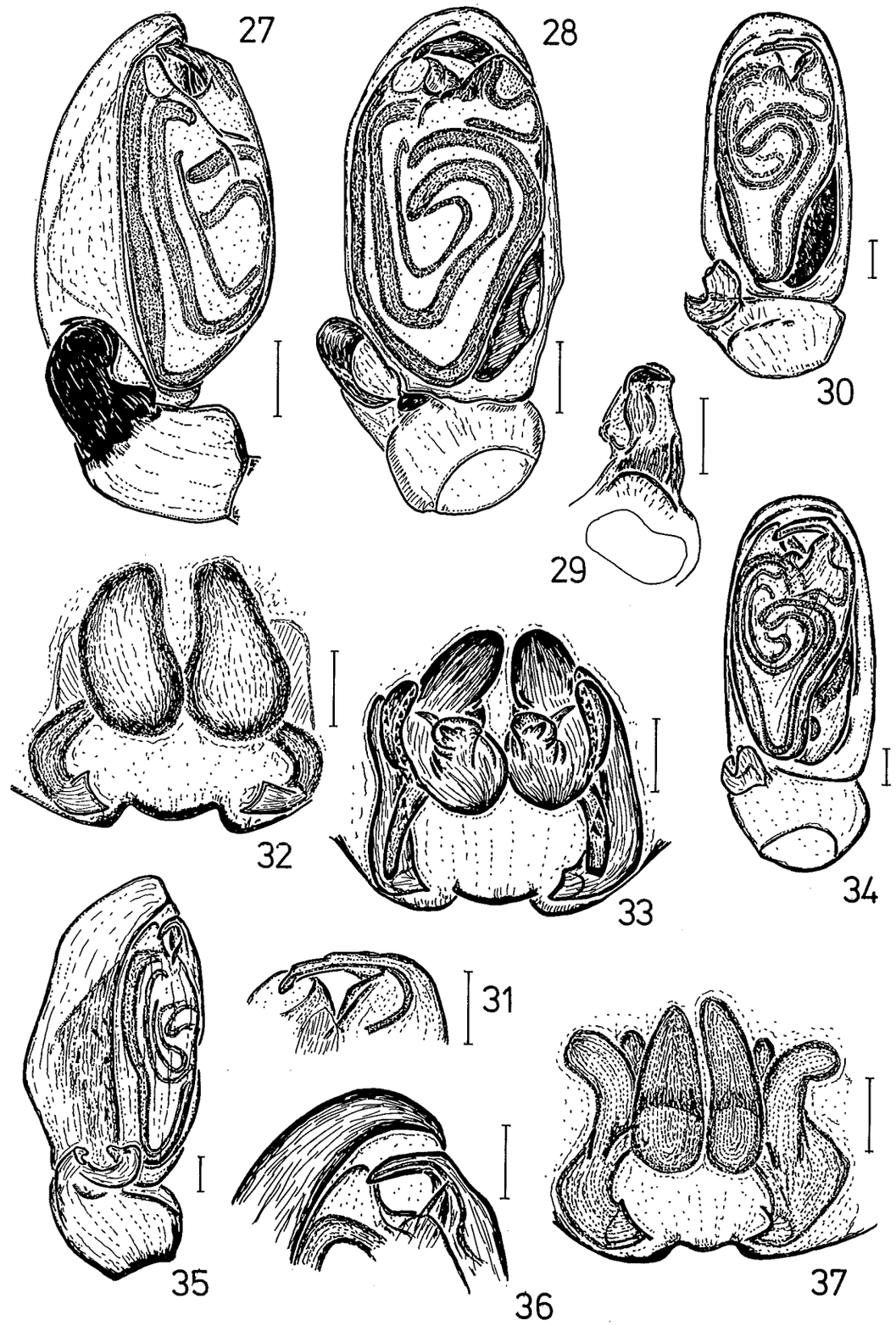
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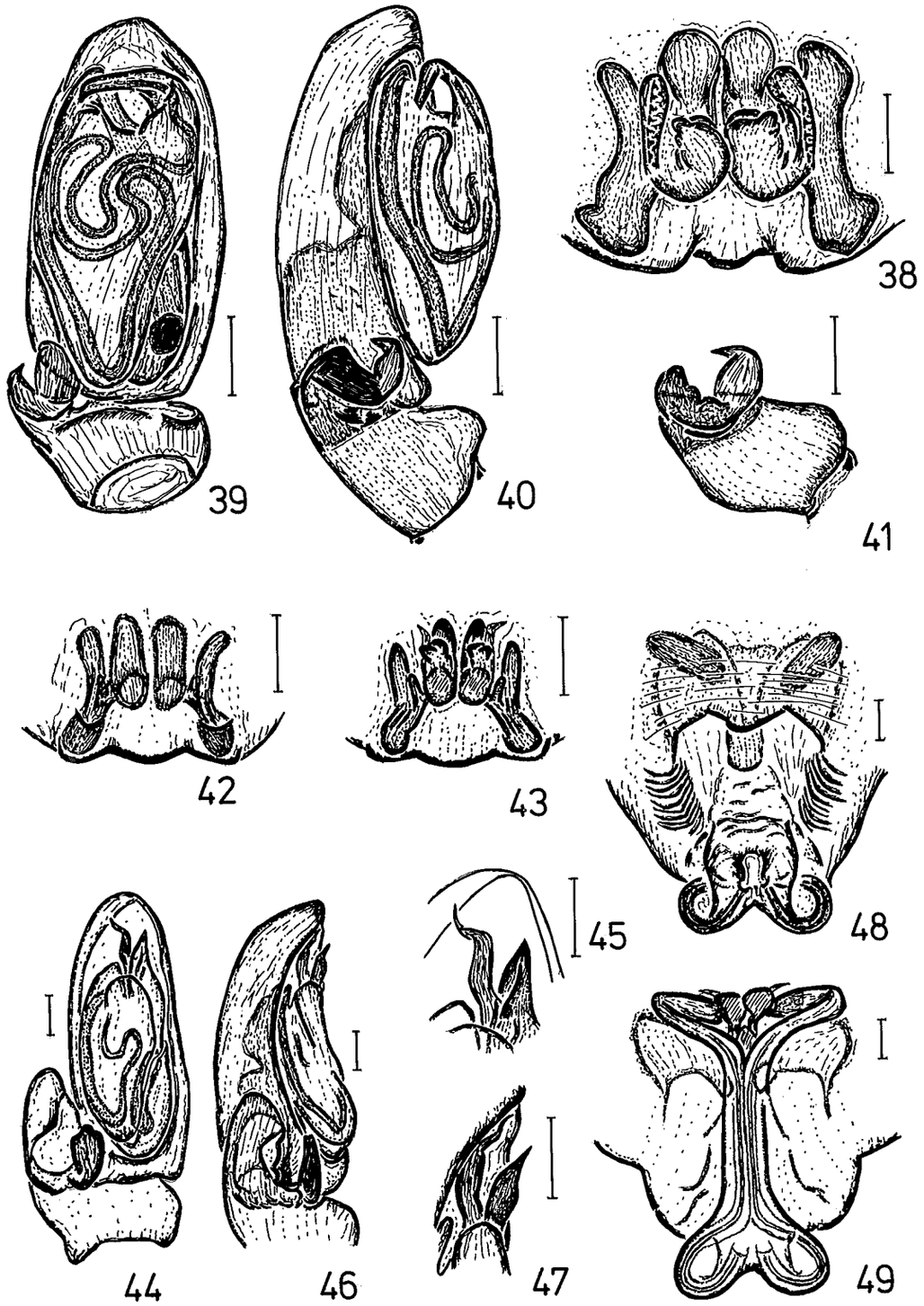
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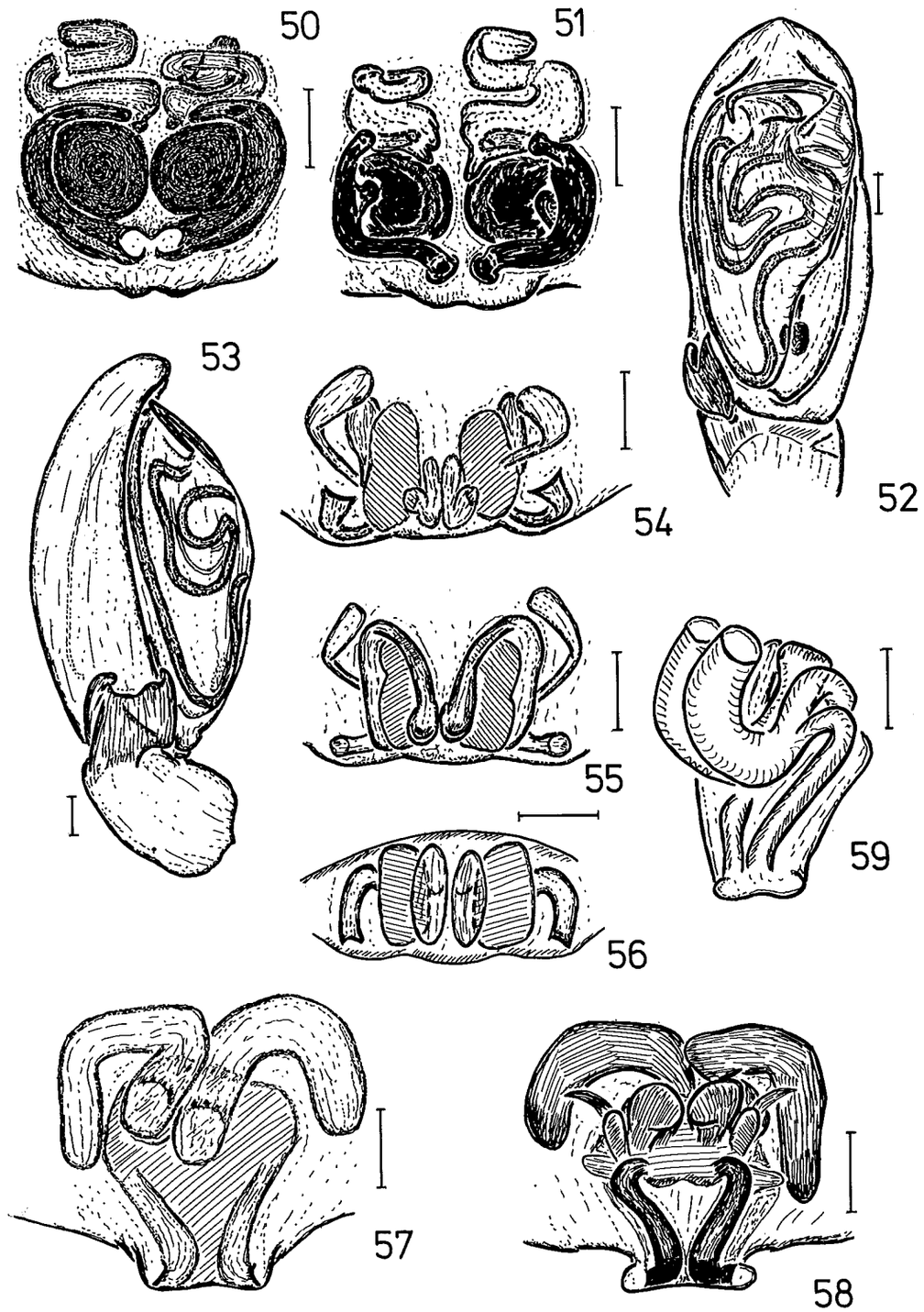
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