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The spider genus *Clubiona* LATREILLE 1804 in the Caucasus, USSR[1])

(Arachnida: Araneae: Clubionidae).

By

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Moscow.

With 20 figures, 2 maps and 3 tables.

Abstract: A revision of the Caucasian *Clubiona* is presented based on both extensive collections and literature data. The currently known *Clubiona* fauna of the Caucasus comprises 18 species, of which 11 are new to the region under study, and 4 new to science: *C. alexeevi* n. sp., *C. hyrcanica* n. sp., *C. golovatchi* n. sp., *C. pseudosimilis* n. sp. Faunistic data, association with vegetation types, distribution between natural regions, and areology are given.

Introduction.

The spider fauna of the Caucasus is known to be poorly explored. As regards *Clubiona* LATREILLE 1804, only seven species have hitherto been reported from the region concerned: *C. lutescens* WESTRING 1851, *C. similis* L. KOCH 1867, *C. neglecta* O. PICKARD-CAMBRIDGE 1862, *C. pallidula* (CLERCK 1757), *C. phragmitis* C. L. KOCH 1843, *C. corticalis* (WALCKENAER 1802), *C. caerulescens* L. KOCH 1867.

Besides, *frutetorum* L. KOCH 1867 erroneously recorded from the Caucasus (DUNIN 1984: Azerbaijan, Apsheron Peninsula; DUNIN 1989: S-slope of the Caucasus Major) appears to belong actually to *alpicola* KULCZYŃSKI 1882, as a revision of pertinent material has revealed. Obviously also erroneous are reports of *frutetorum* in the "Caucasus" (KOCH 1867) and at the Black Sea Coast (SPASSKY 1937), being in fact *alpicola*. *C. marmorata* L. KOCH 1867 (SHAROV et al. 1984: Krasnodar) is actually a *Cheiracanthium mildei* L. KOCH 1864 (material examined).

The present paper is a revision of *Clubiona* of the Caucasus as being based on extensive collections from all over the region involved (Map 1). Besides purely

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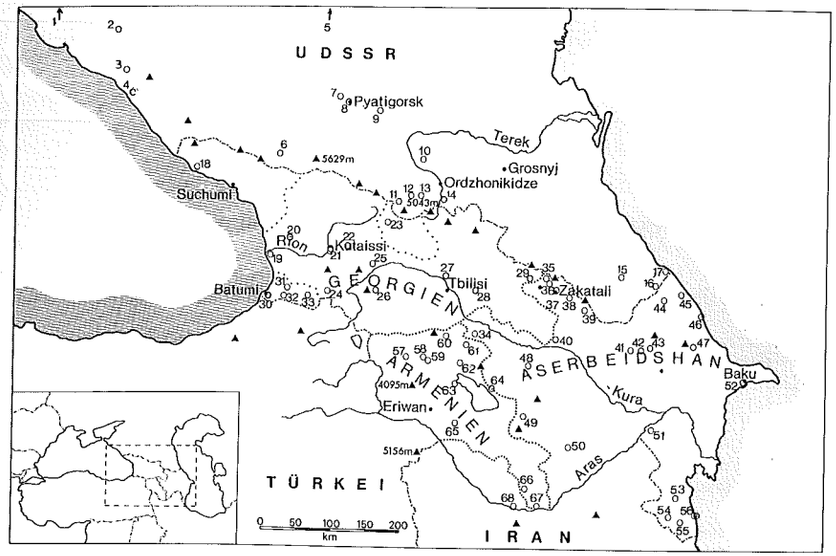
[1]) Contributions to the fauna of the Caucasus, conducted by S.I. GOLOVATCH and J. MARTENS 1981, No. 17. — Nr. 16: Stuttg. Beitr. Naturkde., (A) 444: 1–11; 1990. — Sponsored by Soviet Academy of Sciences (S.I.G., J.M.) and German Research Society (J.M.).



Map 1. The localities of Caucasian *Clubiona*. — Krasnodar Province: 1 = Slavyansk District; 2 = Krasnodar; 3 = Psebe; 4 = Lazarevskoye. — Stavropol Prov.: 5 = Petrovsk Distr.; 6 = Teberda Reserve; 7 = Zheleznovodsk; 8 = Pyatigorsk; 9 = Novopavlovsk. — N-Osetian ASSR: 10 = Kabardino-Sunzhenskiy Mt. Ridge; 11 = Tsey Mt. Ridge; 12 = Ardon basin; 13 = Fiagdon basin; 14 = Baltik. — Dagestan ASSR: 15 = Khiv; 16 = Magaramkent; 17 = Samur Delta. — Georgia, Abkhazia: 18 = Myussera Reserve. — Georgia: 19 = Poti; 20 = Khobi; 21 = Kutaisi; 22 = Tkibuli; 23 = Kvaisi; 24 = Adigeni; 25 = Surami (= Rikoti) Pass; 26 = Bakuriani; 27 = Mtskheta; 28 = Mariamdjvari Reserve; 29 = Lagodekhi Reserve. — Georgia, Adjaria: 30 = Batumi; 31 = Zeraboseli; 32 = Keda; 33 = Khulo. — Azerbaijan: 34 = Kazakh; 35 = Aghkemal; 36 = Rochigel; 37 = Zakataly & Dzhar; 38 = Kashkachay; 39 = Bash-Layski; 40 = Alazani River Mouth; 41 = Vandam; 42 = Ismailly; 43 = Pirkuli Reserve & Pirkuli; 44 = Kuba; 45 = Nabran; 46 = Divichi; 47 = Altyagach; 48 = Kirovabad; 49 = Kelbadjar; 50 = Shusha; 51 = Saatly; 52 = Baku; 53 = Masally; 54 = Lerik; 55 = Hyrcan Reserve; 56 = Lenkoran. — Armenia: 57 = Spitak; 58 = Pushkinpass; 59 = Kirovakan; 60 = Alaverdi; 61 = Idjevan; 62 = Dilizhan Reserve; 63 = Sevan Town; 64 = Pambak; 65 = Khosrov Reserve; 66 = Kadjaran; 67 = Megri. — Azerbaijan, Nakhichevan ASSR: 68 = Ordubad.

faunistic and taxonomic data, a chorological analysis has been attempted, including peculiarities of the vertical zonal distribution, association with natural provinces, and areology.

Altogether, more than 300 adults of Caucasian *Clubiona* have been studied. The majority of the materials treated below were collected by Dr. S. I. Golovatch (S.G.) (Moscow), Prof. Dr. J. Martens (J.M.) (Mainz), Dr. P. M. Dunin (P.D.) (Baku), Mr. S. K. Alexeev (S.A.) (Moscow), Dr. K. Yu. Eskov (K.E.) (Moscow), Mr. D. V. Logunov (D.L.) (Novosibirsk), Dr. Yu. M. Marusik (Yu.M.) (Magadan) (the names arranged according to the significance of the materials managed). Besides, some further sporadic collectings of Mr. K. G. Mikhailov

(K.M.) (Moscow), Dr. V. I. Ovcharenko (V.O.) (Leningrad), Miss N. S. Egorova (N.E.) (Leningrad), Miss E. A. Prokofyeva-Belskaya (E.P.) (Uralsk Area), Miss I. M. Marova (I.M.) (Moscow), Mr. D. I. Gavryushin (D.G.) (Moscow), Mr. A. V. Tanasevitch (A.T.) (Moscow), Miss E. G. Akramovskaya (E.A.) (Erevan), Prof. Dr. N. M. Chernova (N. Ch.) (Moscow), A. Yu. Ivantsov (A.I.) (Leningrad), Kh. Aliev (Kh.A.) (Baku), V. G. Onipchenko (V.On.) (Moscow) have been incorporated as well. The above names are referred to below only by the respective abbreviations. In the text, each locality is followed by the respective number put in square brackets and referring to the number in Map 1.

All the above materials have been shared, as indicated below, between the collections of the Zoological Museum of the Moscow State University (ZMMU), Senckenberg Museum, Frankfurt a. M. (SMF) Naturhistorisches Museum, Wien (NHM) and Chair of Invertebrate Zoology Perm State University (PSU).

All measurements given below are in mm; the measurements of holotypes and the number of analyzed specimens are given in brackets.

Nomenclatorial remarks have not been given, while for full nomenclature the reader must otherwise see Bonnet (1956).

Acknowledgements: I am deeply grateful to the many persons whose materials have served as the basis of the present paper: Dr. S. I. Golovatch, Prof. Dr. J. Martens, Dr. P. M. Dunin, Mr. S. K. Alexeev, Dr. K. Yu. Eskov, Mr. D. V. Logunov, Dr. Yu. M. Marusik, Dr. V. I. Ovcharenko, Miss E. A. Prokofyeva-Belskaya, Mr. D. I. Gavryushin, Mr. A. V. Tanasevitch, Miss E. G. Akramovskaya and to my wife I. M. Marova. Besides, I wish to express my particular gratitude to Dr. S. I. Golovatch for both help and encouragement in the course of the whole work, as well as to Dr. A. S. Utochkin (Perm) and Dr. N. M. Pakhorukov (Perm) for the facilities provided during my stay at the PSU.

List of Caucasian *Clubiona*.

I. *trivialis*-group.

Clubiona diversa O. Pickard-Cambridge 1862.

Material: ♀ (ZMMU), Stavropol Prov., Teberda Reserve [6], Malaya Khatipara Mt. Ridge, 2700–2800 m, *Festuca varia* alpine meadow, 9.–15.VIII.1987, leg. V.On. — ♀ (NMH), N-Osetia, Ardon basin [12], left side of Alagyr Canyon, opposite Unal, N- slope 3°, 1200 m, *Stipa-Andropogon* mountainous steppe, 11.VI.–9.VII.1985, leg. S.A. — ♂ ♀ (SMF 368102), ibidem, 27.VII.–7.IX.1985, leg. S.A. — ♀ (ZMMU), Ardon basin [12], left side of Alagyr Canyon, opposite Unal, S-slope 3–4°, 1170 m, *Andropogon-Stipa* mountainous steppe, 9.–27.VII.1985, leg. S.A. — ♀ (ZMMU), ♀ (SMF 36811), N-Osetia, Ardon basin [12], Skalistyi Mt. Ridge, W-spur of Kariukhokh Mt., Khallon, Khunratkhokh Mt., subalpine grassland of *Festuca varia*, S-slope 10–25°, 2300 m, 2.VI.–12.VII.1985, leg. S.A. — ♀ (ZMMU), N-Osetia, Tsey Mt. Ridge [11], S-slope, 2500 m, 19.VIII.1982, leg. S.A. — ♂ (ZMMU), N-Osetia, Tsey Mt. Ridge [11], S-slope 30–45°, 3 km E Tsey, 2550 m, grassland of upper forest line (betw. sparse pine stand), 29.IX.–24.X.1985, leg. S.A. — ♀ (ZMMU), Azerbaijan, Shemakha Distr., Pirkuli Reserve [43], subalpine zone, 1900–2100 m, 3.VI.1984, leg. D.L.

Distribution: USSR, center and north of European part, S-Ural. Europe (including Mediterranean regions), Japan, S-Korea. — New for the Caucasian fauna.

Clubiona juvenis SIMON 1878.

Material: ♀ (ZMMU), Caucasus, Krasnodar Prov., Slavyansk Distr. [1], wheat field, 26.VI.1970, leg. N.E. — ♀ (PSU, slide), Middle Asia, Syrdarya Area, 1933, leg. M. I. DANILOVA.

Distribution: USSR, Estonia, Ukraine (steppes of Black Sea Coast). Middle Europe, Romania, China (Kansu Prov.). — New for the Caucasian fauna.

Clubiona alexeevi n. sp.

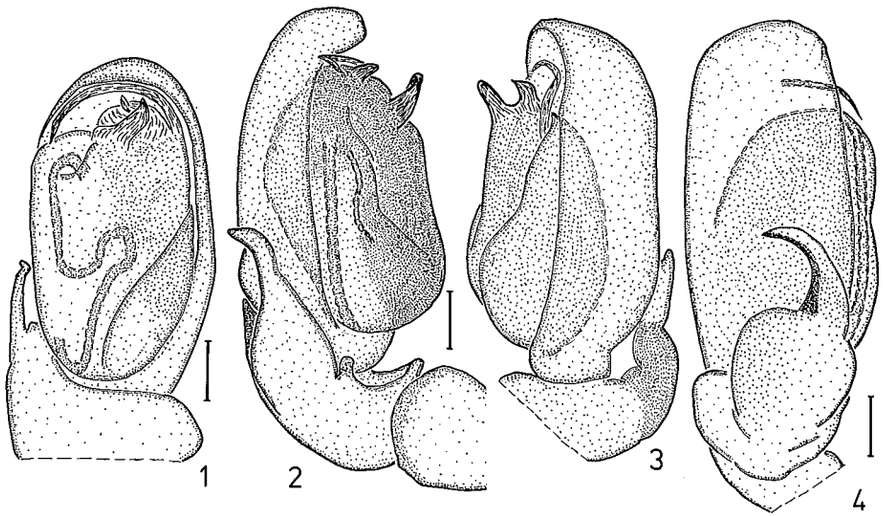
Figs. 1–4.

Holotype: ♂ (ZMMU Ta-4437), Caucasus, N-Osetia, Kabardino-Sunzhensky Mt. Ridge [10], 4 km NW Karjin, WSW- slope of ravine, 30°, 500 m, young oak forest with *Cornus mas*, 30.VII.–24.VIII.1985, leg. S.A.

Derivatio nominis: The species is dedicated to SERGEJ K. ALEXEEV, my friend and colleague during the field work in N-Osetia.

Diagnosis: ♂ is closer to *brevipes* BLACKWALL 1841 by the structure of the tegulum and embolus, but differs by the shape of the tibial apophysis (as in *comta* C. L. KOCH 1839).

Description, ♂: Total length 4·60. Carapace: 2·35 long, 1·75 wide, ratio 1·34. Carapace and sternum reddish-brown, chelicerae chestnut-coloured, legs dark cream-coloured. Leg armature: femur I–II dorsally 1.1.2, III–IV dorsally 1.1.3,



Figs. 1–4. *Clubiona alexeevi* n. sp., ♂ holotype, right palp. — 1) ventral; 2) lateral; 3) inner; 4) dorsal view. — Scale = 0·14 mm.

patella III–IV retrolaterally 1, tibia I–II ventrally 2.2, III dorsally 2, ventrally 1, IV dorsally 2.2, ventrally 1.1.1, metatarsus I–II ventrally 2, III dorsally 2.1.2, laterally 2, ventrally 2.1.2. The armature of the tibia & metatarsus III (the left leg is absent) is abberrant; the typical armature of *Clubiona* species is following: tibia III dorsally 2.2., ventrally 1.1 (or 1.1.1), metatarsus III dorsally 2.1.2, laterally 1.2 (or 2.2), ventrally 2.2.

Legs:

	Fe	Pt	Ti	Mt	Ta	Total
♂ I	1·50	0·88	1·45	1·08	0·55	5·46
II	1·63	0·88	1·60	1·13	0·55	5·79
III	1·43	0·68	0·98	1·23	0·45	4·77
IV	1·90	0·80	1·55	1·98	0·58	6·81

Palp as Figs. 1–4, measurements: Cb 0·46, Ti 0·17, Pt 0·21, Fe 0·44.
Abdomen: 2·25 long, 1·25 wide, ratio 1·80, dark brown.

Remarks: Until the ♀ of *alexeevi* n. sp. will be discovered and described, the relegation of this species to the *trivialis*-group will be tentative. In general, judging from the structure of the ♂ palp (tibial apophysis, embolus, tegulum), the *trivialis* and *brevipes*-groups are indistinguishable inter se. The *brevipes*-group has been defined by the epigynal structure, as the copulatory tubes are directed in this case laterad, whereas in the *trivialis*-group they are stretched forward (WIEHLE 1965).

Clubiona hyrcanica n. sp.

Figs. 5–8.

Holotype: ♂ (ZMMU Ta-4438), Caucasus, Azerbaijan, Hyrcan Reserve [55], nemoral forest, *Rhododendron* & fern thickets, 100–200 m, 23.VI.1983, leg. D.L.

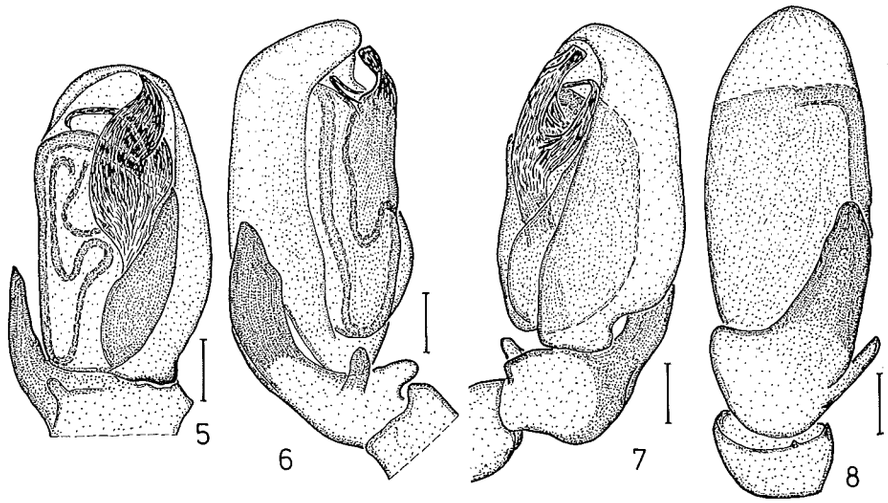
Diagnosis: ♂ seems to be particularly close to *marmorata* by the structure of the tegular apophysis, embolus, and tibial apophysis, but differs by the presence of a small additional process on the palpal tibia.

Description, ♂: Total length 4·40. Carapace: 2·30 long, 1·70 wide, ratio 1·35. Carapace and sternum reddish-brown, chelicerae 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 ventrally 1.2, II ventrally 2.2, III dorsally 2.2, ventrally 1, IV dorsally 2.2, ventrally 1.1.1, metatarsus I–II ventrally 1, III right dorsally 2.2, laterally 1.2, ventrally 2.2, III left dorsally 2.1.2, laterally 1.2, ventrally 2.2, IV dorsally 2.1.2, laterally 2.2, ventrally 2.2.

Legs:

	Fe	Pt	Ti	Mt	Ta	Total
♂ I	1·45	0·85	1·33	1·00	0·50	5·13
II	1·55	0·93	1·53	1·15	0·50	5·65
III	1·35	0·75	0·95	1·25	0·53	4·83
IV	1·88	0·85	1·50	2·00	0·53	6·75

Palp as Figs. 5–8, measurements: Cb 0·44, Ti 0·16, Pt 0·19, Fe 0·37.
Abdomen: 2·10 long, 1·40 wide, ratio 1·50, tobacco-brown.



Figs. 5–8. *Clubiona hyrcanica* n. sp., ♂ holotype, right palp. — 5) ventral; 6) lateral; 7) inner; 8) dorsal view. — Scale = 0·14 mm.

II. *brevipes*-group.

Clubiona brevipes Blackwall 1841.

Material: ♀ (SMF 36812), Caucasus, Georgia, Mariamdjvari Reserve [28], ENE Sagaredjo, *Fagus, Carpinus, Acer, Pinus* etc. forest, litter, under bark & stones, 13.–14.V.1987, leg. S.G. & K.E. — ♀ (ZMMU) Azerbaijan, Kutkashen Distr., Vandam [41], 900 m, 10.VIII.1979, leg. P.D.

Distribution: USSR, W- & C-European part, Kurile Islands. Europe (including Mediterranean regions). — New for the Caucasian fauna.

III. *comta*-group.

Clubiona genevensis L. Koch 1866 — *Clubiona vegeta* L. Koch in Simon 1874.

Material: ♀ (ZMMU), Caucasus, Azerbaijan, Shemakha Distr., Pirkuli Reserve [43], subalpine zone, 1800 m, 27.V.1984, leg. D. L. — ♂ (ZMMU), Azerbaijan, Caspian Seashore, E Divichi [46], 10 m, *Juncus, Artemisia, Salsola* tussocks on sandy dunes, 18. & 21.IV.1987, leg. S.G. & K.E. — ♂ (ZMMU), Armenia, 4 km NNW Megri [67], *Juglans* & oak shrub with *Paliurus* & *Rosa*, village Legvaz, litter & under stones, 1000 m, 24.–25.IV.1983, leg. S.G.

Distribution: USSR, NW-Kazakhstan, Turkmenia, Kirghizia. Europe. Mediterranean region: Palestine, Algeria, Marocco.

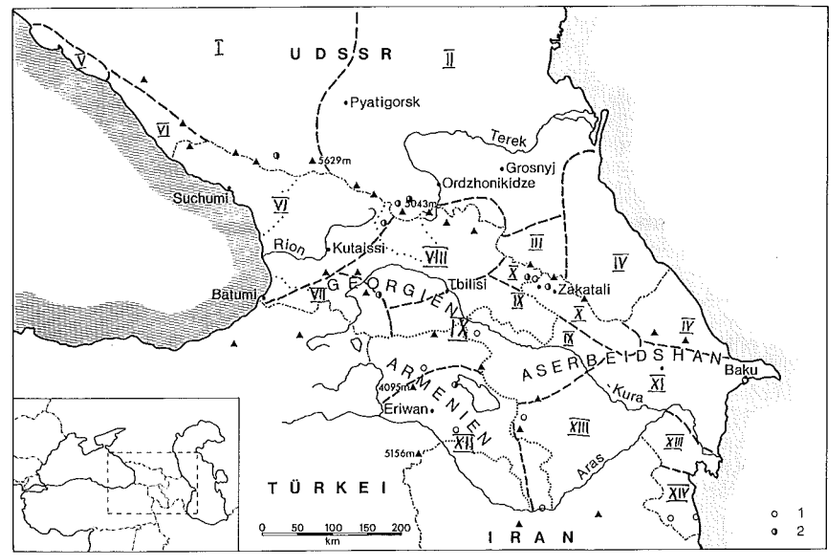
Remarks: Differences between these species (especially between ♀♀), are very obscure (Helsdingen 1979, Mikhailov 1989). In future papers I suppose to return to this problem in due detail.

IV. *terrestris*-group.

Clubiona alpicola Kulczyński 1882.

Map 2.

Material: 2♀ (ZMMU), Caucasus, Georgia, Lagodekhi Reserve [29], Alazani River Valley, 300–400 m, 22.VII.1982, leg. Yu.M. — ♀ (SMF 36813), ♀ (ZMMU), Azerbaijan, Kazakh [34], forest along river, 20.VII.1978, leg. P.D. — ♂ (ZMMU), Azerbaijan, Baku [52], 23.IX.1980, leg. P.D. — ♀ (ZMMU), Azerbaijan, S Baku [52], Khanlar, near water,



Map 2. Natural provinces of the Caucasus after Gulisashvili (1964): I = western part of N-Caucasus; II = central part of N-Caucasus; III = Inner Mountaineous Dagestan; IV = eastern part of N-Caucasus; V = Novorossiysk Region; VI = W-Transcaucasia; VII = Meskheto-Djavakhetian Region; VIII = Inner Kartalian Region; IX = C-Transcaucasia; X = Alazani-Autoranian Region; XI = Shirvanian Region; XII = S-Transcaucasia; XIII = Karabakh-Zangezurian Region; XIV = Talysh. — Localities: 1 = *C. alpicola* Kulczyński 1882; 2 = *C. pseudosimilis* n. sp.

19.VIII.1986, leg. P.D. — ♂ (SMF 36814), ♂ (NHM), Azerbaijan, Lesser Istisu, halfway betw. Kelbajar [49] & Istisu, 1550 m, *Quercus* & *Acer* shrub on slope, litter, 31.V.1987, leg. S.G. & K.E. — 2♂ ♀ (ZMMU), Azerbaijan, Lerik [54] Distr., Gosmalyan, *Populus* stand along stream, 1300 m, 28.VI.1985, leg. P.D. — 3♂ (ZMMU), ibidem, 4.VII.1985, leg. P.D. — ♂♀ (SMF 36815), Azerbaijan, Lenkoran [56], Dashdatuk, 200–250 m, mouth of Bashara River, under stones, 4.VII.1983, leg. D.L. — ♂ ♀ (SMF 36816), 2♀ (ZMMU), ♀ (NHM), Armenia, 5 km W Spitak [59], near Geghasar, Pambak Canyon, 1650–1750 m, forest of *Salix, Acer, Fraxinus,* etc., 13.XI.1985, leg. S.G. — ♂ ♀ (ZMMU), Armenia, Ararat Distr., Khosrov Reserve [65], 1450–1550 m, *Juniperus* with oak & hawthorn, along river, litter & under stones, 19.–20.V.1983, leg. S.G. — ♂ (ZMMU), Armenia, 4 km NNW Megri [67], *Juglans* & oak shrub with *Polyurus* & *Rosa,* village Legvaz, litter & under stones, 1000 m, 24.–25.IV.1983, leg. S.G. — ♂ (SMF 36817), 3♂ (ZMMU), Armenia, Megri [67] Distr., SSE Lichk, Megri River Valley, 1530 m, oak wood, litter & under stones, in rotten wood, 25.IV.1983, leg. S.G.

Distribution: Caucasus: Azerbaijan (Apsheron Peninsula, Dunin 1984: as *C. frutetorum*) S macroslope of Caucasus Major: lower & middle mountaneous forest belts (Dunin 1989: as *C. frutetorum*). USSR: the Carpathians; Turkmenia: Kopetdagh Mts. C-Europe. — New for the Caucasian fauna.

Clubiona lutescens Westring 1851.

Material: ♀ (ZMMU), Caucasus, Krasnodar [2], Khomuty, 5.VIII.1982, leg. E.P. — ♀ (SMF 36818), Krasnodar Prov., Tuapse Distr., 15 km SE Novomikhailovskiy, Psebe [3], deciduous forest, litter, under stones & rotten logs, 29.X.1981, leg. S.G. — ♂ (SMF 36819), Stavropol Prov., Pyatigorsk [8], Mt. Mashuk, 600 m, park of *Fraxinus, Acer, Quercus,* etc., litter, 29. & 31.V.1982, leg. S.G. — ♂ (ZMMU), Stavropol Prov., Teberda Reserve [6], E slope of Malaya Khatipara Mt. Ridge, *Fagus* forest, 1400 m, litter, 25.–26.VI.1986, leg. K.M. — ♀ (NHM), Teberda Reserve [6], along Teberda River, *Alnus* thickets, 1300 m, litter, 26.VI.1986, leg. K.M. — ♀ (ZMMU), Teberda Reserve [6], Canyon Gonachkhir between Teberda & Dombai, road to Klukhor Pass, 1700–1900 m, *Abies, Fagus, Acer* etc. forest, 1.VI.1985, leg. S.G. — ♂ (ZMMU), Teberda Reserve [6], Kizgich Canyon N of Arkhyz, 1550–1650 m, *Abies, Picea, Pinus, Fagus, Betula* & *Acer* forest, litter, under bark & stones, 5.VI.1985, leg. S.G. — ♀ (ZMMU), same locality, 2000 m, 20.–21.V.1987, leg. I.M. — ♂ (ZMMU), N-Osetia, Kabardino-Sunzhenskiy Mt. Ridge [10], betw. Karjin & Elkhotovo, NW- slope & bottom of ravine, 570 m, *Fagus* forest with *Rubus* & *Festuca,* 13.VI.–4.VII.1985, leg. S.A. — ♂ ♀ (SMF 36820), N-Osetia, Fiagdon basin [13], E part of Kartsagom Canyon, S- slope of Kartsinskiy (Pastbishchniy) Mt. Ridge, old oak forest, S- slope 20–30°, 900 m, 26.V.–7.VII.1985, leg. S.A. — ♀ (ZMMU), N-Osetia, Ardon basin [12], Bokovoy Mt. Ridge, left side of Kasar Canyon, Uiltsa (7 km above Buron), *Acer, Fraxinus, Ulmus, Quercus,* etc., forest, ESE- slope 7°, 1500 m, 31.V.–23.VII.1985, leg. S.A. — ♂ (ZMMU), ibidem, 15.VIII.–12.IX.1985, leg. S.A. — ♀ (SMF 36821), 2♀ (ZMMU), Daghestan, Chiragchay Valley, Khiv [15], 900–950 m, *Carpinus, Fagus, Corylus, Rhododendron,* etc. forest, litter & under stones, 24.X.1987, leg. S.G. — ♂ (ZMMU), Georgia, Abkhazia, Myussera Reserve [18], 20–130 m, mixed deciduous forest (*Castanea, Alnus,* etc.), litter, under bark & stones, 8.–10.IV.1983, leg. S.G. — ♂ ♀ (SMF 36823), Georgia, NE Poti [19], Chaladidi, *Alnus, Quercus, Fraxinus* forest on swamp, litter, 13.IV.1983, leg. S.G. — ♂ ♀ (SMF 36822), 6♂ 8♀ (ZMMU), Georgia, Khobi [20] Distr., Kolkhida Reserve, *Alnus* forest, litter, 11.–13.IV.1988, leg. D.L. & A.I. — ♀ (ZMMU), Georgia, Kutaisi [21] Distr., Sataplia Reserve, 400 m, *Fagus* forest, 5.VI.1981, leg. S.G. & J.M. — 2♀ (ZMMU), Georgia, 15 km W Adigeni [24], *Abies, Picea, Fagus, Acer,* etc. forest, 1500–1700 m, litter, logs, under stones, 14.–15.V.1983, leg. S.G. — ♂ (NHM), Georgia, Surami (Rikoti) Pass [25], ca. 1000 m, *Fagus, Alnus, Castanea, Rhododendron* forest, litter & under stones, 14.IV. & 17.V.1983, leg. S.G. — ♀ (SMF 36824), Georgia, Mukhura, ca. 15 km N Tkibuli [22], 700–800 m, *Castanea, Fagus, Carpinus* etc. forest, litter, under bark & stones, 7.–9.V.1987, leg. S.G. & K.E. — ♂ (ZMMU), Georgia, Mariamdjvari Reserve [28], ENE Sagaredjo, 1150–1250 m, *Fagus, Carpinus, Acer, Pinus* etc. forest, litter, under bark & stones, 13.–14.V.1987, leg. S.G. & K.E. — ♂ ♀ (SMF 36825), ♂ (ZMMU), Georgia, Lagodekhi Reserve [29], 550 m, grassland in forest near swamp, 29.VI.1982, leg. Yu.M. — ♂ ♀ (NHM), 3♀ (ZMMU), Georgia, surroundings of Lagodekhi Reserve [29], forest along Alazani River, 300 m, 26.VII.1982, leg. Yu.M. — ♂ (SMF 36826), Georgia, Adjaria, Batumi [30], Botanical Garden, 20–150 m, 30.V.–7.VI.1981, leg. S.G. & J.M. — ♂ (ZMMU), ibidem, 50–150 m, *Fagus, Rhododendron* forest, 8.IV.1988, leg. D.L. — ♀ (ZMMU), Georgia, Adjaria, Khulo [33] Distr., 3 km W Danisparauli, deciduous forest, litter, 10.X.1981, leg. S.G. — 2♂ (ZMMU), Georgia, Adjaria, Kintrish Reserve, Zeraboseli [31], *Rhododendron* thickets, 600–800 m, 2.VI.1981, leg. S.G. & J.M. — ♂ (ZMMU), Azerbaijan, Alazani River Valley, 20 km above mouth [40], forest along river, IX.1981, leg. S.A. — ♀ (ZMMU), Azerbaijan, Shemakha Distr., Pirkuli Reserve [43], 1300 m, *Fagus, Carpinus, Quercus* forest, 20.IX.1984, leg. D.L. — ♀ (ZMMU), Azerbaijan, Khachmas Distr., Nabran [45], Om, forest, Caspian Seashore, 7.VII.1976, leg. P.D. — ♂ ♀ (SMF 36827), Azerbaijan, Chilisa ca. 7 km N Kelbadjar [49], 1450–1500 m, *Quercus, Carpinus, Acer* etc. forest, litter & under bark, 31.V.1987, leg. S.G. & K.E. — ♀ (ZMMU), Azerbaijan, Turshsu ca. 15 km S Shusha [50], 1700 m, *Quercus, Carpinus, Acer* etc. forest, litter, 3.VI.1987, leg. S.G. & K.E. — ♂ (ZMMU), Azerbaijan, Masally [53], near Istisu, *Ruscus* thickets, under bark & stones, 1.II.1988, leg. D.G. — ♂ (SMF 36828), ♂ (ZMMU), Armenia, Kirovakan [59], *Quercus, Acer, Fagus* etc. forest, 1600 m, litter, 22.–23.V.1987, leg. S.G. & K.E.

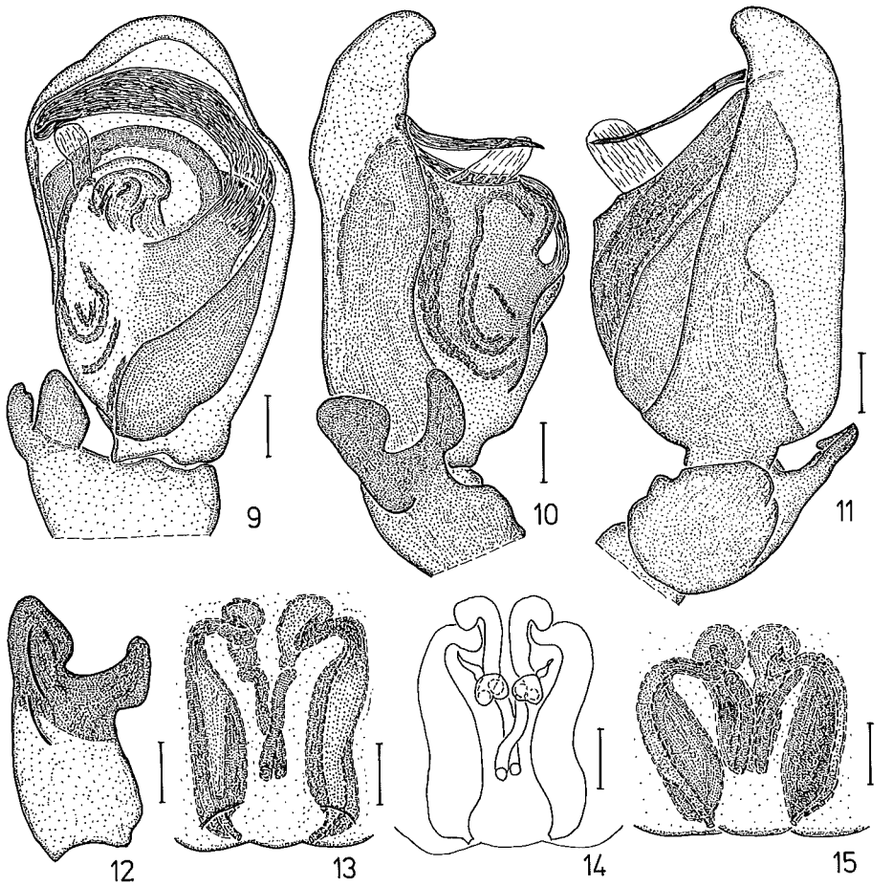
Distribution: Caucasus: Checheno-Ingushetian ASSR (Minoranskiy et al. 1984); Azerbaijan: S macroslope of the Caucasus Major: piedmont, lower & middle mountainous forest belts (Dunin 1989). USSR: European part, Ural, N- & E-Kazakhstan, Siberia, Far East. Europe, Japan, S-Korea, N-America.

Clubiona golovatchi n. sp.

Figs. 9–15.

Holotype: ♂ (ZMMU Ta-4439), Caucasus, Krasnodar Prov., Sochi, Lazarevskoye [4], village Saloniki, deciduous forest, litter 28.X.1981, leg. S.G.

Paratypes: ♀ (ZMMU), Caucasus, Krasnodar Prov., Slavyansk Distr. [1], wheat field, 11.VI.1970, leg. N.E. — ♀ (SMF 36829), Krasnodar [2], Leskhoz, 27.VIII.1982, leg. E.P. — ♂ (SMF 36830), same as holotype. — ♂ (ZMMU), Stavropol Prov., W Zheleznovodsk [7], oak & hawthorn shrub, litter, 29.V.1982, leg. S.G. — ♀ (ZMMU), N-Osetia, Ardon basin [12], left side of Alagir Canyon, opposite Zintsar, SSE- slope 7–15°, 1050 m, young oak forest, 11.VI.–9.VII.1985, leg. S.A. — ♂ ♀ (NHM), ♂ (SMF 36831), ♂ (ZMMU), N-Osetia, Tsey Mt. Ridge [11], 5 km E Tsey, S- slope 5–7°, 1300 m, multiherbaceous grassland of forest zone, 6.VI.–21.VII.1985, leg. S.A. — ♂ (ZMMU), ibidem, 21.VII.–8.VIII.1985, leg. S.A. — ♂ (ZMMU), N-Osetia, S Ordzhonikidze, betw. Chmi & Baltik [14], *Quercus, Ulmus* on slope, litter & under stones, 2.VI.1982, leg. S.G. — ♂ ♀ (SMF 36832), ♀ (ZMMU), Daghestan, Chiragchay Valley, Sardarkent betw. Kasumkent & Khiv [15], *Crataegus, Rosa, Carpinus, Juglans* etc. shrub, 650 m, 24.X.1987, leg. S.G. — ♂ (ZMMU), Daghestan, Samur Valley, Garakh, ca. 35 km SW Magaramkent [16], 700–800 m, *Crataegus, Quercus, Acer, Rosa* etc. shrub, litter, 23.X.1987, leg. S.G. — ♀ (PSU), Georgia, Lagodekhi Reserve [29], 22.VIII 1938, leg. F. A. Zaitsev. — ♀ (ZMMU), Georgia, Lagodekhi Reserve [29], 600 m, forest border, litter, 27.VII.1982, leg. Yu.M. — ♂ (SMF 36833), Georgia, Adjaria, Keda [32] Distr., Magutseti, *Platanus* forest, litter, 9.X.1981, leg. S.G. — ♀ (SMF 36834), Azerbaijan, Zakataly Reserve, Aghkemal [35], 1800–2100 m, 24.–27.V.1981, leg. S.G. & J.M. — ♀ (ZMMU), Azer-



Figs. 9–15. *Clubiona golovatchi* n. sp. — 9–12) ♂ paratype, right palp; 13–15) ♀ paratype, epigyne. — 9) ventral; 10) lateral; 11) inner view; 12) tibial apophysis; 13) ventral; 14) dorsal (vulva); 15) ventral view: variation (Slavyansk Distr.). — Scale = 0·14 mm.

baijan, Zakataly Reserve, Dzhar [37], Tsiliban Mt. Ridge, 1000 m, 8.VII.1981, leg. P.D. — ♀ (ZMMU), Azerbaijan, Kakhi Distr., Kashkachay [38], 1000 m, 3.VII.1977, leg. P.D. — ♀ (SMF 36835), Azerbaijan, NW above Bash-Layski [39], ca. 20 km NNW Sheki, 1250 m, *Fagus, Carpinus, Acer* etc. forest, litter, 3.V.1987, leg. S.G. & K.E. — ♂ ♀ (SMF 36836), ♀ (ZMMU), Azerbaijan, Yarymdja SE Altyagach [47], 1320–1350 m, *Fagus, Quercus, Carpinus* etc. forest, litter & under bark, 20. & 24.–25.IV.1987, leg. S.G. & K.E. — ♀ (ZMMU), Azerbaijan, Shemakha Distr., Pirkuli Reserve [43], 1600–1700 m, *Fagus, Carpinus, Quercus* forest, 27.V.1984, leg. D.L. — ♂ (ZMMU), Azerbaijan, Kuba [44] Distr., Alych, 1000 m, *Quercus, Fagus, Carpinus* forest, on grass, 16.VII.1984, leg. P.D. — ♂ ♀ (ZMMU), Azerbaijan, Chilisa ca. 7 km N Kelbadjar [49], 1450–1500 m, *Quercus, Carpinus, Acer* etc. forest, litter & under

bark, 31.V.1987, leg. S.G. & K.E. — ♂ (ZMMU), Azerbaijan, Istisu ca. 8 km SW Masally [53], *Quercus, Acer, Carpinus* etc. forest, 80–140 m, litter, under bark & stones, 19.–20.X.1983, leg. S.G. — ♂ (ZMMU), Azerbaijan, Hyrcan Reserve [55], near river Bashara, *Urtica, Sambucus,* 28.VI.1983, leg. D.L. — ♂ (ZMMU), Armenia, Kafan Distr., near Kadjaran [66], Megri Mt. Ridge, N Tashtun Pass, 2000 m, oak forest on steep slope, litter, logs, 27.IV.1983, leg. S.G.

Derivatio nominis: The species is dedicated to SERGEJ I. GOLOVATCH, the famous explorer of the Caucasian fauna.

Diagnosis: ♂ is most similar to *alpicola,* but differs in the absence of a transverse stria on the embolus. From *saxatilis*[1)] it differs by the shape of the tibial apophysis and the wider embolus. ♀ seems to be especially closely related to *saxatilis,* but differs in the straight copulatory tubes directed forward or a bit laterad (Fig. 15) and opening behind the posterior part of the epigynal plate but not into the epigynal grooves.

Description, ♂: Carapace 2·38 ± 0·46 (2·35, 10) long, 1·75 ± 0·32 (1·75, 10) wide, ratio 1·36 ± 0·16 (1·34, 10). Carapace reddish, more rarely yellow-orange, reddish-brown, yellow-brown or dark cream-coloured. Chelicerae reddish, more rarely reddish-brown or yellow-orange. Legs dark cream-coloured. Legs armature: femur I–II, dorsally 1.1.2, III–IV dorsally 1.1.3, patella III–IV retrolateral 1, tibia I–II ventrally 2.2, III dorsally 2.2, ventrally 1.1 (or 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.

Legs:

		Fe	Pt	Ti	Mt	Ta	Total
I	♂	1·68±0·40 (1·83 ,10)	0·91±0·21 (0·95, 10)	1·59±0·45 (1·70, 10)	1·17±0·32 (1·25, 10)	0·70±0·14 (0·75, 10)	6·05±1·50 (6·48, 10)
	♀	1·53±0·25 (10)	0·86±0·16 (10)	1·26±0·22 (10)	0·93±0·15 (10)	0·60±0·08 (10)	5·17±0·81 (10)
II	♂	1·75±0·42 (1·88, 10)	0·93±0·18 (0·95, 10)	1·67±0·49 (1·75, 10)	1·20±0·32 (1·30, 10)	0·70±0·15 (0·75, 10)	6·27±1·26 (6·63, 10)
	♀	1·59±0·26 (10)	0·89±0·15 (10)	1·34±0·27 (10)	0·97±0·17 (10)	0·61±0·11 (10)	5·40±0·91 (10)
III	♂	1·58±0·35 (1·70, 10)	0·75±0·18 (0·75, 10)	1·18±0·31 (1·30, 10)	1·38±0·41 (1·55, 10)	0·54±0·08 (0·58, 10)	5·42±1·30 (5·88, 10)
	♀	1·45±0·20 (10)	0·75±0·13 (10)	1·03±0·18 (10)	1·21±0·20 (10)	0·52±0·06 (10)	4·95±0·70 (10)
IV	♂	2·16±0·44 (2·33, 10)	0·90±0·12 (0·93, 10)	1·78±0·47 (1·95, 10)	2·31±0·65 (2·53, 10)	0·68±0·16 (0·68, 10)	7·84±1·77 (8·40, 10)
	♀	2·10±0·28 (10)	0·92±0·13 (10)	1·66±0·26 (10)	2·09±0·34 (10)	0·66±0·10 (10)	7·43±1·07 (10)

Palpus as Figs. 9–12, measurements: Cb 0·89 ± 0·14 (0·95, 10), Ti 0·34 ± 0·07 (0·35, 10), Pt 0·33 ± 0·07 (0·33, 10), Fe 0·65 ± 0·14 (0·65, 10).

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1) Recently (THALER 1981) the seldom reported *saxatilis* L. KOCH 1867 has been synonymized under the more common European *dvoraki* MILLER 1943. I insist of the usage of *saxatilis* instead of *dvoraki* according to the rule of priority. Prof. K. THALER (pers. comm.) agrees with my proposal.

Abdomen 2·80 ± 0·64 (3·10, 10) long, 1·59 ± 0·37 (1·65, 10) wide, ratio 1·77 ± 0·26 (1·88, 10), testaceous or reddish.

♀: Carapace 2·56 ± 0·32 (10) long, 1·86 ± 0·29 (10), wide, ratio 1·38 ± 0·12 (10). The coloration of the carapace, chelicerae, and legs as in ♂. Legs armature as in ♂, variations: femur II dorsally 1.1.3, tibia I ventrally 2.1.2, III dorsally 2.2, ventrally 1 (dorsally 2.1, ventrally 1.1), IV dorsally 2.2, ventrally 1.2.1, metatarsus III dorsally 2.2, laterally 1.2, ventrally 2.2.

Abdomen 3·53 ± 1·43 (10) long, 2·19 ± 0·90 (10) wide, ratio 1·64 ± 0·20 (10), coloration as of ♂. Epigyne as Figs. 13–15. The direction of the copulatory tubes is variable: usually they are directed forward (Figs. 13–14), more rarely a bit laterad (Fig. 15; specimens from Slavyansk Distr. and Krasnodar).

V. *similis*-group.

Clubiona similis L. Koch 1867.

Material: ♂ (SMF 36837), Caucasus, Krasnodar [2], Khomuty, forest border, on trees, 27.VI.1982, leg. E.P. — ♂ (ZMMU), Stavropol Prov., E Novopavlovsk [9], forest of *Quercus, Salix, Ulmus* etc., along stream, 28.V.1982, leg. S.G. — ♀ (SMF 36838), Stavropol Prov., Teberda Reserve [6], Tretye Badukskoe Lake, 1950 m, pine, under bark, 3.VII.1986, leg. K.M. — ♀ (ZMMU), Teberda Reserve [6], Dombay, Mussa-Achitara Mt., 2300 m, subalpine grassland, 4.VII.1986, leg. K.M. — ♂ (ZMMU), Azerbaijan, Kuba [44], park, 20.VI.1976, leg. & det. P.D. — ♂ (ZMMU), Azerbaijan, Nabran [45], ca. 30 km NW Khachmas, *Quercus, Carpinus, Acer* etc. forest, 0 m, litter & under bark, 21.–22.IV.1987, leg. S.G. & K.E. — ♀ (ZMMU), Azerbaijan, Shusha [50], 1700 m, *Pinus* stand, on grass, 3.VIII.1986, leg. & det. P.D. — ♀ (ZMMU), Azerbaijan, Lenkoran [56], secondary shrub, on grass, 6.X.1984, leg. Kh.A. — 4♀ (ZMMU), Azerbaijan, Lerik [54] Distr., Divagach, 2.VII.1985, leg. & det. P.D.

Distribution: Caucasus: Checheno-Ingushetian ASSR (Minoranskiy et al. 1984; Minoranskiy 1988); Georgia (Mkheidze 1964). USSR: C-, W- & E-European part, S-Ural, S-Sibiria. C-Europe.

Clubiona neglecta O. Pickard-Cambridge 1862.

Material: ♀ (ZMMU), Caucasus, Krasnodar Prov., Slavyansk Distr., [1], wheat field, 11.VI.1970, leg. & det. N.E. — ♀ (ZMMU), Stavropol Prov., Petrovsk Distr. [5], Rogataya Balka, wheat field, 15.VII.1971, leg. & det. N.E. — ♀ (ZMMU), Stavropol Prov., Teberda Reserve [6], SE slope of Malaya Khatipara Mt. Ridge, 2100 m, polydominant grassland at pine forest, 6.–7.VII.1986, leg. K.M. & I. M. — ♂ (SMF 36839), N-Osetia, Kabardino-Sunzhenskiy Mt. Ridge [10], betw. Karjin & Elkhotovo, summit Zeka, S- slope 10–20°, 680 m, *Stipa*-multiherbaceous steppe, 13.VI.–4.VII.1985, leg. S.A. — ♀ (SMF 36840), ibidem, 4.–30.VII.1985, leg. S.A. — ♂ (NHM), ♂ (ZMMU), ibidem, 30.VII.–24.VIII.1985, leg. S.A. — 2♂ 1♀ (ZMMU), N-Osetia, Ardon basin [12], Bokovoy Mt. Ridge, left side of Kasar Canyon, Wiltsa (7 km upstream of Buron), polydominant grassland, ESE- slope 2–5°, 1500 m, 23.VII.–15.VIII.1985, leg. S.A. — ♀ (NHM), ibidem, 15.VIII.–12.IX.1985, leg. S.A. — ♂ ♀ (SMF 36841), Dagestan, Samur Delta [17], XI.1978, leg. A.T. — ♂ (ZMMU), Georgia, Batumi [30], in grass, 10.VIII.1981, leg. D.L. — ♀ (ZMMU), Azerbaijan, Kutkashen Distr., Vandam [41], 900 m, 10.VIII.1979, leg. & det. P.D. — ♂ (SMF 36842), ♂ (ZMMU), Azerbaijan, Shemakha Distr., Pirkuli Reserve [43], 1350–1400 m, damp grassland at *Fagus*-fruit forest, 2.VI.1984, leg. D.L. — 2♂ (PSU), Azerbaijan, Kirovabad [48], cotton field, 25.VII.1935; leg. V. N. Rekach. — ♀ (ZMMU), Azerbaijan, Saatly [51] Distr., Dzhafarkhan, O m, forest plantation, multiherbaceous grassland, 30.V.1978, leg. P.D. — ♀ (ZMMU), ibidem, 14.VII.1982, leg. P. D. — ♀ (SMF 36843), Azerbaijan, Zuvand, Lerik [54] Distr., Divagach, 1100 m, along Lenkoranchay River, semiartificial grassland between *Populus* stand, 11.VII.1983, leg. P.D. — ♂ (ZMMU), Divagach, 2.VII.1985, leg. P.D. — 2♂ (ZMMU), Lerik [54] Distr., Gosmalyan, 1300 m, *Populus* stand along stream, on grass, 1.–4.VII.1985, leg. & det. P.D. — ♀ (ZMMU), Azerbaijan, Hyrcan Reserve [55], Telmana, 100 m, *Quercus, Carpinus* forest, 20.VI.1985, leg. P.D. — 2♀ (NHM), Azerbaijan, Lenkoran [56], Azfilial, 0–50 m, *Juncus, Sparganium* thickets, 2.VII.1983, leg. D.L. — ♂ ♀ (SMF 36844), 2♀ (ZMMU), Lenkoran [56], Alexeevka, 0–50 m, *Juncus,* 6.–7.VII.1983, leg. D. L. — 2♀ (ZMMU), Lenkoran [56], 3–5 km NW Alexeevka, 0–50 m, *Cynodon* thickets, 13.VII.1983, leg. D.L. — ♀ (ZMMU), Lenkoran [56], Goftoni, in grass, 5.V.1986, leg. & det. P.D. — ♀ (ZMMU), Azerbaijan, Nakhichevan ASSR, Ordubad [68] Distr., 4 km S Bilav, old sparse *Salix* & *Polyurus* forest along river, 1200 m, in litter & logs, 23.IV.1983, leg. S.G. — ♂ (SMF 36845), Armenia, Pambak [64], 9.X.1984, leg. E.A. — ♀ (NHM), 10♀ (ZMMU), Armenia, Sewan Town [63], 2000 m, near railway station, under stones, 28.VII.1983, leg. D.L. & V.O., det. D.L. — ♀ (ZMMU), Armenia, Sevan Town [63], 2000 m, wasteland, 29.VII.1983, leg. & det. D.L. — ♀ (SMF 36846), Armenia, surroundings of Sevan Town [63], 2000 m, near hydrobiological station, under stones, 31.VII.1983, leg. & det. D.L.

Distribution: Caucasus: L. Koch 1867 (without location: *montana* L. Koch 1867); Krasnodar Prov.: Mikhailovskiy Pass (Spassky 1937); Georgia (Mkheidze 1964); Azerbaijan: S-macroslope of Caucasus Major: lower & middle mountainous forest & subalpine belts (Dunin 1989). USSR: C- & S-European part, E-Kazakhstan, S-Siberia, Kirghizia. Europe, Afghanistan, N-China, S-Korea.

Clubiona pseudosimilis n. sp.

Figs. 16–20, Map 2.

Holotype: ♂ (ZMMU Ta-4440), Caucasus, Georgia, Lagodekhi Reserve [29], 2100 m, subalpine zone, under grass, 1.VIII.1982, leg. Yu.M.

Paratypes: ♀ (SMF 36847), Stavropol Prov., Teberda Reserve [6], SE-slope of Malaya Khatipara Mt. Ridge, Olenya Balka, 2100–2200 m, pine forest, litter, 6.VII.1986, leg. K.M. — ♀ (NHM), ♀ (ZMMU), Teberda Reserve [6], SE- slope of Malaya Khatipara Mt. Ridge, 2100 m, polydominant grassland at pine forest, 6.–7.VII.1986, leg. K.M. & I.M. — ♀ (ZMMU), Teberda Reserve [6], Dombai, *Abies, Fagus, Picea, Betula, Acer* etc. forest, 1700–1800 m, litter, under bark & stones, 31.V.1985, leg. S.G. — ♂ (ZMMU), N-Osetia, Tsey Mt. Ridge [11], 1740 m, N-slope 10°, *Pinus, Tilia, Sorbus* etc. forest with *Rhododendron* & ferns, 12.VIII.1977, leg. N.Ch. — ♀ (SMF 36848), ♀ (ZMMU), N-Osetia, Ardon basin [12], Shubi, 2–5 km from caves, 1.–6.VII.1981, leg. S.A. — ♀ (ZMMU), Georgia, S-Osetia, 15 km E Kvaisi [23], Suram Mt. Ridge, Ertso Pass, ca. 1000 m, deciduous bush along a spring, litter & under stones, 20.X.1981, leg. S.G. — 2♀ (SMF 36849), Georgia, Lagodekhi Reserve [29], surroundings of the meteorological station, subalpine zone, 2100 m, 22.VI.1982, leg. Yu.M. — ♂ ♀ (NHM), ♂ ♀ (SMF 36850), ibidem, 2050–2400 m, 23.VI.1982, leg. Yu.M. — 4♀ (ZMMU), ibidem, 2300 m, 23.VI.1982, leg. Yu.M. — 2♀ (SMF 36851), 10♀ (ZMMU), ibidem, 1950 m, 31.VII.1982, leg. Yu.M. — 6♀ (ZMMU), Lagodekhi Reserve [29], 2600–2700 m, alpine zone, under stones, 3.VIII.1982, leg. Yu.M. — ♀ (NHM), 14♀ (ZMMU), ibidem, Dagestanskaya Tropa, 2400–2600 m, alpine zone, 7.VIII.1982, leg. Yu.M.

— ♂ (SMF 36852), 2♂ 2♀ (ZMMU), Georgia, S Bakuriani [26], Tskhra-Tskaro Pass, 2100 m, *Betula* sparse forest at upper forest line, 13.V.1982, leg. S.G. — ♀ (PSU, slide), Georgia, Lagodekhi Reserve [29], 27.VII.1937, leg. F. A. Zaitsev. — 2♀ (ZMMU), Azerbaijan, Zakataly Reserve, SE- slope & spur of Rochigel Mt. [36], upper forest line, 2000–2200 m, 13.–14.VI.1986, leg. K.M. — 2♀ (ZMMU), Armenia, 3 km W Sevan Town [63], 2000 m, surroundings of peninsula, under stones, 3.VII.1983, leg. D.L.

Diagnosis: ♂ is closer to *neglecta* by the structure of the palp, but differs in having a considerably shorter embolus. ♀ seems especially closely related to *similis*, but is distinguished by the huge receptacula seminis (this being particularly well visible in mesal view).

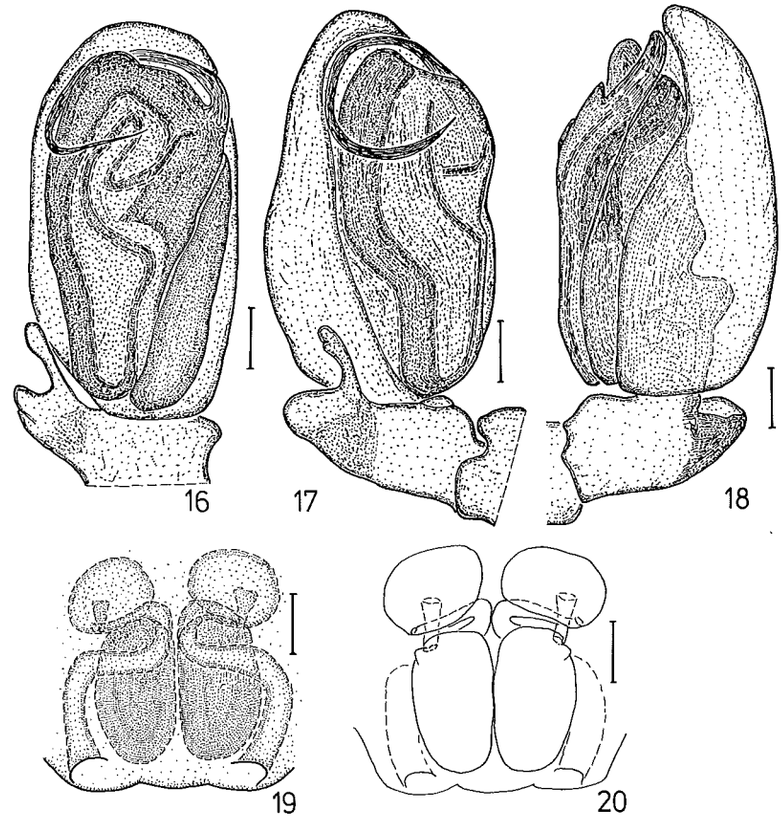
Description, ♂: Carapace 2·52 ± 0·45 (2·50, 6) long, 1·91 ± 0·30 (1·90, 6) wide, ratio 1·32 ± 0·11 (1·32, 6), reddish, more rarely pale reddish-brown, the anterior part chestnut-coloured. Legs dark cream-coloured. Leg armature: femur I–II dorsally 1.1.2, III–IV dorsally 1.1.3 (more rarely IV dorsally 1.1.2), patella III–IV retrolaterally 1, tibia I–II ventrally 2.2 (more rarely 1.2 or 2.1), III dorsally 2.2, ventrally 1.1 (more rarely 1.1.1 or 1), IV dorsally 2.2, ventrally 1.1.1, metatarsus I–II ventrally 2, III dorsally 2.1.2, laterally 1.2 (more rarely 2.2), ventrally 2.2, IV dorsally 2.1.2, laterally 2.2, ventrally 2.1.2.

Legs:		Fe	Pt	Ti	Mt	Ta	Total
I	♂	1·66±0·24 (1·58, 6)	0·93±0·19 (0·95, 6)	1·59±0·32 (1·58, 6)	1·19±0·28 (1·13, 6)	0·75±0·11 (0·75, 6)	6·12±1·13 (5·98, 6)
	♀	1·68±0·40 (10)	0·97±0·19 (10)	1·42±0·29 (10)	1·07±0·26 (10)	0·66±0·14 (10)	5·80±1·21 (10)
II	♂	1·75±0·36 (1·70, 6)	0·94±0·23 (0·90, 6)	1·61±0·33 (1·58, 6)	1·22±0·24 (1·20, 6)	0·76±0·12 (0·80, 6)	6·29±1·20 (6·18, 6)
	♀	1·76±0·35 (10)	0·98±0·21 (10)	1·51±0·33 (10)	1·09±0·28 (10)	0·68±0·14 (10)	5·99±1·34 (10)
III	♂	1·53±0·21 (1·50, 6)	0·80±0·14 (0·80, 6)	1·13±0·24 (1·13, 6)	1·33±0·26 (1·28, 6)	0·56±0·09 (0·63, 6)	5·34±0·87 (5·33, 6)
	♀	1·55±0·34 (10)	0·85±0·14 (10)	1·09±0·22 (10)	1·27±0·34 (10)	0·55±0·07 (10)	5·31±1·06 (10)
IV	♂	2·00±0·31 (1·95, 6)	0·92±0·18 (0·90, 6)	1·64±0·36 (1·60, 6)	2·06±0·48 (2·00, 6)	0·70±0·10 (0·70, 6)	7·31±1·37 (7·15, 6)
	♀	2·15±0·37 (10)	1·00±0·13 (10)	1·74±0·34 (10)	2·15±0·41 (10)	0·69±0·13 (10)	7·73±1·30 (10)

Palp as Figs. 16–18, measurements: Cb 0·98 ± 0·12 (1·00, 6), Ti 0·38 ± 0·03 (0·38, 6), Pt 0·42 ± 0·08 (0·45, 6) Fe 0·80 ± 0·24 (0·63, 6).

Abdomen 2·92 ± 0·42 (2·85, 6) long, 1·80 ± 0·26 (1·90, 6) wide, ratio 1·62 ± 0·19 (1·50, 6), dark brown, more rarely brown, snuff-coloured or testaceous.

♀: Carapace 2·84 ± 0·49 (28), 2·11 ± 0·41 (28), ratio 1·35 ± 0·18 (28), pale reddish-brown, more rarely reddish, yellow-reddish or dark cream-coloured, the anterior part chestnut-coloured, more rarely dark cream-coloured. Legs dark cream-coloured. Leg armature as of ♂, variations: tibia I ventrally 2.3, III dorsally 2.2, ventrally 1, metatarsus III dorsally 2.2, laterally 1.2 (or 2.2), ventrally 2.2, IV dorsally 2.1.2 (or 2.2.2), laterally 2.2, ventrally 2.2.



Figs. 16–20. *Clubiona pseudosimilis* n. sp. — 16–18) ♂ paratype, right palp; 19–20) ♀ paratype, epigyne. — 16) ventral; 17) lateral; 18) inner view; 19) ventral; 20) dorsal (vulva). — Scale = 0·14 mm.

Abdomen 3·84 ± 0·96 (28) long, 2·46 ± 0·64 (28) wide, ratio 1·56 ± 0·22 (28), coloration as in ♂. Epigyne see Figs. 19–20.

Clubiona germanica Thorell 1870.

Material: ♀ (NHM), ♀ (SMF 36853), 2♀ (ZMMU), Caucasus, Georgia, Khobi [20] Distr., Kolkhida Reserve, *Alnus* forest, in rotten wood & litter, 13.–14.IV.1988, leg. D.L. & A.I. — ♀ (SMF 36854), ♀ (ZMMU), ibidem, marsh, *Typha*, 13.IV.1988, leg. D.L. & A.I.

Distribution: USSR: European part, Ural, Siberia (up to Jenisey River), E-Kazakhstan, Amur Area, Europe. — New for the Caucasian fauna.

VI. *pallidula*-group.

Clubiona pallidula (Clerck 1757).

Material: ♀ (SMF 36855), Caucasus, Krasnodar Prov., Slavyansk Distr. [1], wheat field, 5.–6.VII.1971, leg. N.E. — ♀ (NHM), Krasnodar [2], 27.VI.1982, leg. E.P. — 2♀ (ZMMU), Krasnodar [2], Khomuty, 12.–15.VIII.1982, leg. E.P. — ♀ (SMF 36856), Stavropol Prov., 40 km W Pyatigorsk [8], Suvorovskaya, 12.VI.1983, leg. E.P. — ♂ (ZMMU), N-Osetia, Fiagdon basin [13], E-part of Kartsagom Canyon, S-slope of Kartsinsky (Pastbishchnyi) Mt. Ridge, 20–30°, oak forest, 900 m, 26.V.–7.VII.1985, leg. S. A. — ♂ (SMF 36857), ♂ (ZMMU), Georgia, NE Poti [19], Chaladidi, *Alnus, Quercus, Fraxinus* forest on swamp, litter, 13.IV.1983, leg. S.G. — ♂ (ZMMU), Georgia, Khobi [20] Distr., Kolkhida Reserve, *Alnus* forest, litter, 13.IV.1988, leg. D.L. & A.I. — ♂ (ZMMU), Georgia, pass betw. Tkibuli [22] & Mukhura, 1050 m, *Buxus* stand, litter & soil, 10.V.1987, leg. S.G. & K.E. — ♂ (ZMMU), Georgia, Adjaria, Batumi [30], Korolistavi, Mtirala Mt., ca. 1000 m, *Fagus, Castanea* forest, litter, 18.IV.1988, leg. D.L. & A.I. — ♀ (ZMMU), Azerbaijan, Zakataly [37], 700 m, *Quercus, Carpinus* forest, on grass, 20.VI.1986, leg. & det. P.D. — ♀ (ZMMU), Armenia, Kirivakan [59], *Quercus, Acer, Fagus* etc. forest, 1600 m, litter, 22.–23.V.1987, leg. S.G. & K.E.

Distribution: Caucasus: Krasnodar (Sharov et al. 1984); Georgia (Mkheidze 1964): Batumi (Simon 1899); Azerbaijan: Sheki-Zakataly Region (Atakishiev 1969: *paclidula*), S-macroslope of Caucasus Major: lowland meadow-forest, piedmont forest-steppe, lower forest mountainous belts (Dunin 1989). USSR: European part, Crimea, S-Ural, N- & E-Kazakhstan, S-Siberia (up to Irkutsk Area). Europe, N-America.

Clubiona phragmitis C. L. Koch 1843.

Material: ♀ (SMF 36858), Caucasus, Krasnodar Prov., Slavyansk Distr. [1], wheat field, 1.VII.1970, leg. & det. N.E. — ♂ (SMF 36859), ibidem, 5.–6.VII.1971, leg. & det. N.E. — ♂♀ (SMF 36860), 3♂ 1♀ (ZMMU), Azerbaijan, Shemakha Distr., Pirkuli Reserve [43], ca. 1000 m, Beyuk-Nokhur marsh, 9.–10.IX.1984, leg. D.L. — ♂ (ZMMU), Azerbaijan, Lenkoran [56], Alexeevka, 0–50 m, *Scirpus, Typha,* 2.VII.1983, leg. D.L.

Distribution: Caucasus: Checheno-Ingushetian ASSR (Minoranskiy et al. 1984; Minoranskiy 1988); Azerbaijan: Sheki-Zakataly Region (Atakishiev 1969: *phraqmitis*), S-macroslope of Caucasus Major: lower forest mountainous belt (Dunin 1989). USSR: European part, S-Ural, E-Kazakhstan, Uzbekistan (surroundings of Tashkent), Kirghizia, S-Siberia. Europe, N-America.

VII. *reclusa*-group.

Clubiona stagnatilis Kulczyński 1897.

Material: ♀ (SMF 36861), 2♀ (ZMMU), Caucasus, Stavropol Prov., Teberda Reserve [6], along Teberda River, ca. 1300 m, marsh, 24.VI.1986, leg. K.M. — ♂♀ (ZMMU), ♀ (SMF 36862), Georgia, Khobi [20] Distr., Kolkhida Reserve, marsh, *Typha,* 13.IV.1988, leg. D.L. & A.I. — ♀ (PSU, slide), Georgia, Poti [19], 12.V.1939, leg. T. S. Mkheidze. — ♂ (PSU, slide), ibidem, 14.IX.1939, leg. T. S. Mkheidze.

Distribution: USSR: European part, Ural, S-Siberia, Transbaikalia. Europe. — New for the Caucasian fauna.

VIII. *corticalis*-group.

Clubiona corticalis (Walckenaer 1802).

Material: ♂♀ (SMF 36863), ♂♀ (ZMMU), Caucasus, Azerbaijan, Zakataly [37], ca. 700 m, 6.IV.1978, leg. & det. P.D. — ♀ (SMF 36864), 2♀ (ZMMU), Azerbaijan, Chilisa ca. 7 km N Kelbadjar [49], 1450–1500 m, *Quercus, Carpinus, Acer* etc. forest, litter & under bark, 31.V.1987, leg. S.G. & K.E. — ♀ (ZMMU), Azerbaijan, Turshsu ca. 15 km S Shusha [50], 1700 m, *Quercus, Carpinus, Acer* etc. forest, litter, 3.VI.1987, leg. S.G. & K.E.

Distribution: Caucasus: Azerbaijan: S-macroslope of the Caucasus Major: piedmont, lower & middle mountainous forest belts (Dunin 1989). USSR: Transcarpathia, C-European part. Europe, Tunisia.

IX. *caerulescens*-group.

Clubiona caerulescens L. Koch 1867.

Material: ♂ (SMF 36865), Caucasus, Stavropol Prov., Pyatigorsk [8], Mt. Mashuk, 600 m, park of *Fraxinus, Acer, Quercus* etc., litter, 29. & 31.V.1982, leg. S.G. — ♂♀ (ZMMU), N-Osetia, Kabardino-Sunzhenskiy Mt. Ridge [10], 4 km NW Karjin, WSW-slope of ravine 30°, 500 m, young oak forest with *Cornus mas,* 30.VII.–24.VIII.1985, leg. S.A. — ♂♀ (ZMMU), Georgia, Adjaria, Batumi [30], Korolistavi, Mtirala Mt., ca. 1000 m, *Fagus, Castanea* forest, litter, 18.IV.1988, leg. D.L. & A.I. — ♀ (ZMMU), Georgia, Saguramo Reserve, NE of Mtskheta [27], Zedazeni, 1100–1200 m, *Fagus, Carpinus, Acer* etc. forest, litter & under bark, 20.V.1987, leg. S.G. & K.E. — ♀ (SMF 36866), Georgia, Mariamdjvari Reserve [28], ENE Sagaredjo, 1150–1250 m, *Fagus, Carpinus, Acer, Pinus* etc. forest, litter, under bark & stones, 13.–14.V.1987, leg. S.G. & K.E. — ♀ (ZMMU), Georgia, Lagodekhi Reserve [29], along Shromiskhevi River, young forest, 22.VII.1982, leg. & det. Yu.M. — ♂♀ (SMF 36867), Azerbaijan, NW above Bsh-Layski [39], ca. 20 km NNW Sheki, 1250 m, *Fagus, Carpinus, Acer* etc. forest, litter, 3.V.1987, leg. S.G. & K.E. — ♀ (NHM), ♂♀ (ZMMU), Azerbaijan, Shemakha Distr., Pirkuli Reserve [43], 1300–1400 m, *Fagus, Carpinus* forest, litter, 19. & 25.V.1984, leg. D.L. — 2♀ (SMF 36868), ibidem, *Fagus, Quercus, Carpinus* forest, 1200–1300 m, litter, 26.V.1984, leg. D.L. — 4♂ 5♀ (ZMMU), ibidem, 1400 m, *Fagus* forest, 21., 25. & 26.V.1984, leg. D.L. — 4♀ (ZMMU), ibidem, 1400–1500 m, *Quercus, Fagus, Carpinus* forest, 27.V.1984, leg. D.L. — ♂♀ (SMF 36869), 2♀ (ZMMU), ibidem, 1400–1500 m, sparse stand, litter, 17.IX.1984, leg. D.L. — ♂ 2♀ (ZMMU), ibidem, 1400 m, *Fagus* forest, 20.IX.1984, leg. D.L. — 2♀ (SMF 36870), Pirkuli [43], near observatorium, 1200–1250 m, *Quercus, Acer, Taxus* etc. forest, litter, 30.IV.1987, leg. S.G. & K.E. — ♂ (ZMMU), Azerbaijan, ca. 12 km E Ismailly [42], Gidyman-Chay Valley, 850–880 m, *Fagus, Quercus, Carpinus, Acer* forest, litter & under bark, 1.V.1987, leg. S.G. & K.E. — ♀ (ZMMU), Azerbaijan, Nadirkhanly ca. 12 km NE Kelbadjar [49], 1200 m, *Fraxinus* & *Juglans* stand, litter, 1.VI.1987, leg. S.G. & K.E. — ♀ (SMF 36871), Azerbaijan, Dashanty by Shusha [50], 1100–1300 m, *Quercus, Carpinus* forest, litter, logs, under stones, 1.V.1983, leg. S.G. — ♂♀ (ZMMU), Armenia, Odzum W

Alaverdi [60], 1500–1550 m, *Quercus, Fagus, Carpinus* etc. forest, litter & under stones, 23.–24.V.1987, leg. S.G. & K.E. — ♂ (ZMMU), Armenia, Bazum Mt. Ridge, N- slope of Pushkinpass [58], 1700 m, *Fagus* & *Pinus* forest, litter, 22.V.1987, leg. S.G. & K.E. — ♂ ♀ (SMF 36872), Armenia, Dilizhan Reserve [61], Agartsyn, 1350–1450 m, *Fagus, Acer* etc. forest, litter, 28.–29.V.1987, leg. S.G. & K.E. — ♂ (ZMMU), Armenia, Kirovakan [59], *Quercus, Acer, Fagus* etc. forest, litter, 1600 m, 22.–23.V.1987, leg. S.G. & K.E. — ♀ (ZMMU), Armenia, Ekheknut ca. 20 km N Kirovakan [59], 1200–1250 m, *Quercus, Carpinus, Acer* etc. forest, litter, 23.V.1987, leg. S.G. & K.E. — ♂ (SMF 36873), Armenia, Idzhevan [61] Distr., Tsakhkavan, 850–900 m, *Quercus, Acer, Carpinus* etc. forest, litter & tree hole, 25.V.1987, leg. S.G. & K.E.

Distribution: Causasus, Azerbaijan: Sheki-Zakataly Region (ATAKISHIEV 1969), S-macroslope of Caucasus Major: lower mountainous forest belt (DUNIN 1989). USSR: European part, Ural, N- & E-Kazakhstan, Siberia (Tomsk, Krasnoyarsk). Europe.

A chorological analysis.

Up to now, the USSR fauna of *Clubiona* is known to comprise 40 described species, of which 18 forms have been reported from the Caucasus. Perhaps the richness of the Caucasus in *Clubiona* sp. is overestimated, as such vast areas as S-Siberia and the Far East are highly unexplored with respect to the fauna of this genus. Tentatively, based on pertinent, partly new materials, I would predict the USSR fauna as containing a total of 70–80 *Clubiona* sp., due to which the Caucasian share would no longer be so considerable.

The following zoogeographical analysis of Caucasian *Clubiona* must be understood as rather tentative and incomplete, because the adjacent areas of Turkey and Iran are also known to be poorly explored as regards the spider faunas (e.g., TANASEVITCH 1987). Tab. 1 shows the proportion of different patterns of distribution of the Caucasian *Clubiona* as compared to the fauna of Linyphiidae (TANASEVITCH 1987).

The main part of the Caucasian *Clubiona* fauna (77·8%) is constituted by widespread species (No. 1–5), while the percentage of the Mediterranean elements (only No. 10) is as low as 22·2% (for linyphiids, 69·6 and 30·4%, resp.; TANASEVITCH 1987).

Tab. 1. Zoogeographical composition of the Caucasian *Clubiona* fauna.

No.	Pattern of distribution	No. of species	%	% of linyphiid fauna
1.	Holarctic	3	16·7	9·8
2.	Palaearctic	3	16·7	26·2
3.	Euro + Siberian	4	22·2	9·1
4.	Euro-Ancient Mediterranean	2	11·1	5·7
5.	Euro-Mediterranean	2	11·1	—
6.	European	—	—	18·8
7.	Ancient Mediterranean	—	—	4·1
8.	Mediterranean	—	—	3·3
9.	E-Mediterranean	—	—	2·5
10.	"Caucasian"	4	22·2	20·5

Following TANASEVITCH (1987), I also believe that further studies will prove the ranges of "Caucasian" endemic spiders (excluding those confined to the alpine belt of the Caucasus Major) to be larger than currently known. Interestingly, spiders are perhaps one of the quite few larger animal taxa that seem to have no or at best very few real Caucasian endemic genera, even true endemic species are quite few. The same regularity seems to be true, e.g., for Rhopalocera (Lepidoptera), and ticks (Ixodida). On the contrary, examples of the Caucasus serving as a grand refuge/diversification center not only at the species, but also at the generic level are very numerous, especially as regards the groups known to be less vagile and better associated with a nemoral type of vegetation (i.e., at least of a Tertiary age in situ): Diplopoda (LOHMANDER 1936, GOLOVATCH 1984), Mollusca — Gastropoda (SHILEYKO 1979, 1984).

The relationships of the Caucasian fauna of *Clubiona* are presented in Tab. 2. Natural provinces are cited from GULISASHVILI (1964), see Map 2.

Tab. 2 reflects not only the distribution, but also the state of knowledge of the Caucasian fauna of *Clubiona*. Data are absent for two natural provinces: Novorossiysk and Inner Mountainous Dagestan Regions.

Only seven natural regions of the Caucasus may be considered as relatively sufficiently explored, with at least seven *Clubiona* sp. found in each of them.

TANASEVITCH's (1987) scheme of the vertical zonal distribution of the Caucasian Linyphiidae is, in my opinion, too formal, as it does not consider vegetation types. Due to inversions caused by different exposition and location in the mountains, vegetation communities of one type are known to be able to move with height within wide limits.

Zonal distribution of the Caucasian *Clubiona* fauna is presented in Tab. 3. The majority of the Caucasian *Clubiona* sp. (13, 11, and 10, resp.) appear to be associated with *Quercus*, lowland and *Fagus* forests. The insignificant number of *Clubiona* encountered in arid sparse stands, *Pinus* & *Betula, Juniperus,* and mixed nemoral forests (1, 2, 3, and 3, resp.), are obviously due to underrepresentation in the collecting sites. The data on steppe and particularly on semidesert biotopes are perhaps slightly overestimated. For instance, *alpicola* associated with a mesophilous arboreal vegetation has been found in Baku City (within the semidesert zone) only in a park.

Tab. 2–3 show some eco-geographical characteristics of certain Caucasian *Clubiona*. Thus, *diversa* is a typical inhabitant of the forest zone of Europe; it might have penetrated the Caucasus only together with a forest vegetation. This penetration seems to have happened long ago, as the modern relationship between a forest and a steppe type of vegetation in the plain parts of Europe and partly in the Caucasus is known, to a considerable extent, to be due to human impact. Therefore, penetration of *diversa* into the forest, subalpine, and alpine belts of the Caucasus Major seems to be best accounted for the time when a direct contact between the forest zones of both Europe and the Caucasus existed. As regards *juvenis,* apparently restricted to open landscapes, its occurrence in the plain parts of the Caucasus is highly probable. Like in *diversa,* the species *brevipes* could have arrived at the Caucasus from the north, therefore its occurrence on the northern macroslope of the Caucasus Major is more than likely.

The fact that *alpicola* has been discovered in the Kopetdagh Mts., W-Turkmenistan, which make part of the E-Mediterranean, but still not encountered

Tab. 2. Distribution of *Clubiona* sp. between the geomorphological and natural provinces of the Caucasus.

	diversa	*juvenis*	*alexeevi*	*byrcanica*	*brevipes*	*genevensis + vegeta*	*alpicola*	*lutescens*	*golovatchi*	*similis*	*neglecta*	*pseudosimilis*	*germanica*	*pallidula*	*phragmitis*	*stagnatilis*	*corticalis*	*caerulescens*	Total
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
Pattern of distribution, as in Tab. 1	2	4	10	10	5	2	4	1	10	3	2	10	3	1	1	3	5	3	
Caucasus Major: N-macroslope	+	+	+	—	—	—	—	+	+	+	+	+	—	—	+	+	—	+	11
Caucasus Major: S-macroslope	+	—	—	—	+	+	+	+	+	+	+	+	—	+	+	—	+	+	13
Caucasus Minor	—	—	—	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	15
Western part of N-Caucasus:	—	+	—	—	—	—	—	+	+	+	+	+	—	+	+	+	—	—	9
a) steppe, 0–150 m	—	+	—	—	—	—	—	—	+	—	+	—	—	—	+	—	—	—	4
b) forest-steppe, 100–600 m	—	—	—	—	—	—	—	+	+	+	—	—	—	+	—	—	—	—	4
c) *Fagus* forest, 900–1500 m	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	+	—	—	2
d) *Abies-Picea* forest, 1400–2300 m	—	—	—	—	—	—	—	+	—	+	+	+	—	—	—	—	—	—	4
e) subalpine zone	—	—	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	1
Central part of N-Caucasus:	+	—	+	—	—	—	—	+	+	+	+	+	—	+	—	—	—	+	9
a) steppe	—	—	—	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	1
b) *Quercus* forest	+	—	+	—	—	—	—	+	+	+	—	—	—	+	—	—	—	+	7
c) *Fagus* forest	—	—	—	—	—	—	—	+	—	—	+	+	—	—	—	—	—	—	3
d) *Pinus-Betula* forest	+	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	2
e) subalpine zone	+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
f) alpine zone	+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Eastern part of N-Caucasus:	—	—	—	—	—	+	—	+	+	+	—	—	—	—	—	—	—	—	4
a) lowland forest	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	—	1
b) semidesert	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	—	—	—	1
c) *Quercus* forest, 300–1000 m	—	—	—	—	—	—	—	+	+	+	—	—	—	—	—	—	—	—	3
d) *Fagus* forest, 900–1500 m	—	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	1
W-Transcaucasia:	—	—	—	—	—	—	—	+	+	—	+	—	+	+	—	+	—	+	7
a) lowland forest	—	—	—	—	—	—	—	+	—	—	+	—	+	+	—	+	—	—	5
b) mixed nemoral forest, 0–600 m	—	—	—	—	—	—	—	+	+	—	—	—	—	—	—	—	—	—	2
c) *Castanea* forest, 500–1100 m	—	—	—	—	—	—	—	+	—	—	—	—	—	+	—	—	—	+	3
d) *Fagus* forest, 1000–1600 m	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	—	1
Meskheto-Djavakhetian Region:	—	—	—	—	—	—	—	+	+	—	—	+	—	—	—	—	—	—	5
a) *Quercus* forest, up to 1200 m	—	—	—	—	—	—	—	+	+	—	—	—	—	—	—	—	—	—	2
b) *Picea-Abies* forest, 1000–2200 m	—	—	—	—	—	—	—	+	—	—	—	+	—	—	—	—	—	—	2
Inner-Kartalian Region:	—	—	—	—	—	—	—	+	—	—	—	+	—	—	—	—	—	+	3
a) *Quercus* forest, 500–1100 m	—	—	—	—	—	—	—	—	—	—	—	+	—	—	—	—	—	—	1
b) *Fagus* forest, 1000–1600 m	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	+	2
C-Transcaucasia:	—	—	—	—	+	—	+	+	—	—	+	—	—	+	—	—	—	+	6
a) lowland forest	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	—	1
b) arid sparse forest, up to 600 m	—	—	—	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	1
c) *Quercus iberica* forest, 450–1200 m	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	+	2
d) *Fagus* forest, 900–1700 m	—	—	—	—	+	—	+	+	—	—	—	—	—	—	—	—	—	—	4
e) *Quercus macranthera* forest, 1500–2100 m	—	—	—	—	—	—	—	+	—	—	—	—	—	+	—	—	—	+	3
Alazani-Autoranian Region:	—	—	—	—	+	—	+	+	+	—	+	+	—	+	—	—	+	+	9
a) lowland forest, up to 500 m	—	—	—	—	—	—	+	+	—	—	—	—	—	—	—	—	+	+	4
b) *Castanea & Quercus* forest, 450–1100 m	—	—	—	—	+	—	—	—	+	—	+	—	—	+	—	—	+	—	5
c) *Fagus* forest, 1000–2100 m	—	—	—	—	—	—	—	—	—	—	+	—	—	—	—	—	+	+	3
d) subalpine zone, up to 2500 m	—	—	—	—	—	—	—	—	+	—	—	+	—	—	—	—	—	—	2
Shirvanian Region:	+	—	—	—	—	+	+	+	+	—	+	—	—	—	+	—	—	+	8
a) semidesert	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	—	—	—	1
b) *Quercus* forest, 500–1200 m	—	—	—	—	—	—	—	—	—	—	—	—	—	—	+	—	—	+	2
c) *Fagus* forest, 1000–2300 m	—	—	—	—	—	—	—	+	+	—	+	—	—	—	—	—	—	+	4
d) subalpine zone, 2300–2500 m	+	—	—	—	—	+	—	—	—	—	—	—	—	—	—	—	—	—	2
S-Transcaucasia:	—	—	—	—	—	—	+	—	—	—	+	+	—	—	—	—	—	—	3
a) arid sparse stand, 1200–1700 m	—	—	—	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	1
b) *Juniperus* forest, 1500–2300 m	—	—	—	—	—	—	+	—	—	—	+	—	—	—	—	—	—	—	2
c) *Quercus* forest, 1900–2500 m	—	—	—	—	—	—	+	—	—	—	—	+	—	—	—	—	—	—	2
Karabakh-Zangezurian Region:	—	—	—	—	—	+	+	+	+	+	+	—	—	—	—	—	+	+	8
a) semidesert, up to 900 m	—	—	—	—	—	—	—	—	—	—	+	—	—	—	—	—	—	—	1
b) *Quercus iberica* forest, 1000–1700 m	—	—	—	—	—	+	+	+	—	—	—	—	—	—	—	—	+	+	5
c) *Quercus macranthera* forest, 1600–2400 m	—	—	—	—	—	—	—	+	+	+	—	—	—	—	—	—	—	—	3
Talysh:	—	—	—	+	—	—	+	+	+	+	+	—	—	—	+	—	—	—	7
a) lowland forest, up to 100 m	—	—	—	—	—	—	+	+	—	+	+	—	—	—	+	—	—	—	5
b) mixed nemoral forest, up to 500 m	—	—	—	+	—	—	—	—	+	—	—	—	—	—	—	—	—	—	2
c) *Quercus castaneifolia* forest, 500–1200 m	—	—	—	—	—	—	—	—	—	+	+	—	—	—	—	—	—	—	2
d) *Fagus* forest, 1200–1500 m	—	—	—	—	—	—	+	—	—	—	+	—	—	—	—	—	—	—	2

Tab. 3. Distribution of *Clubiona* sp. between the types of vegetation (after Gulisashvili 1964).

Clubiona spp.	semidesert	steppe	northern forest-steppe	arid sparse forests	lowland forests	mixed nemoral forests	*Castanea* & *Quercus castanei* = *folia* forests	*Quercus* forests	*Fagus* forests	*Picea* & *Abies* forests	*Pinus*, *Betula* forests	*Juniperus* forests	*Quercus macranthera* forests	subalpine zone	alpine zone	Total
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
diversa		+						+	+		+			+	+	4
juvenis																1
alexeevi n. sp.								+								1
byrcanica n. sp.						+										1
brevipes							+		+							2
genevensis–vegeta	+							+						+		3
alpicola	+				+			+	+			+				5
lutescens			+	+	+	+	+	+	+	+			+			8
golovatchi n. sp.		+	+	+		+		+	+		+		+	+		8
similis			+		+		+	+		+		+	+			7
neglecta	+	+		+	+		+	+	+	+		+				9
pseudosimilis n. sp.					+			+	+	+				+		5
germanica					+											1
pallidula			+		+		+	+					+			5
phragmitis		+			+			+								3
stagnatilis					+				+							2
corticalis					+		+	+	+							4
caerulescens					+		+	+	+			+				5
Total	3	4	4	1	11	3	7	13	10	4	2	3	4	5	1	

at the northern macroslope of the Caucasus Major (see Map 2) seems to witness to this species' penetration into the Caucasus from the south. At least the disjunction Carpathians — Caucasus seems to be easier accounted for a southern pathway of migration in this particular case. In the Alps, *alpicola* is known to occur as high in the mountains as 2600 m (Thaler 1981).

The "endemic" *golovatchi* n. sp. inhabits various vegetation types ranging from steppe to subalpine ones, hence its discovery outside the Caucasus seems to be very likely. As regards *neglecta*, it appears to prefer open landscapes devoid of primary vegetation; only once it has been discovered in a sparse forest. As to *pseudosimilis* n. sp. (Map 2), it inhabits the upper forest and subalpine belts, therefore its occurrence well outside the Caucasus seems improbable. Both *corticalis* and *caerulescens* are European forest-dwellers, but the former seems rather to be confined to nemoral forests, whereas the latter is associated with various vegetation types.

To summarize, colonization of the Caucasus by *Clubiona* sp. seems to have followed two major routes, from the south via Iran and/or Anatolia, probably since the Tertiary, and the other from the north via Europe, more likely since the Quaternary. Only *alpicola* and, to a lesser extent, *corticalis* may be attributed with a fair degree of probability to the initial nemoral element of the Caucasian fauna dating back up to the Middle Tertiary.

As a whole, the Caucasian fauna of *Clubiona* can be characterized as being European, with practically a complete absence of truly Mediterranean elements.

Резюме.

Ревизия фауны пауков рода *Clubiona* Кавказа, основанная на общирных коллекциях и литературных данных. Приведен список 18 видов, из которых 11 впервые отмечены для региона и 4 описываются как новые: *C. alexeevi* n. sp., *C. byrcanica* n. sp., *C. golovatchi* n. sp. и *C. pseudosimilis* n. sp. Для каждого вида указаны места находок, распределение по естественно-историческим областям, вертикальным зонам и тип ареала.

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