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SPIDERS FROM THE SOUTHERN KURILE ISLANDS  
I. ARANEIDA FROM ITURUP<sup>1)</sup>

BY

M. L. PELLE and S. SAITO

(With eight text-figures)

A complete species list for any group of animals is the basis for a clear insight into the meaning of geographical distribution. Many excellent treaties of local faunas have been published for many groups of animals of Japan. Unfortunately, however, biological investigations of the Kurile islands are at the present very limited in their scope and inclusion of certain animals, particularly the Arachnids. For this group of animals only a very few studies can be enumerated. So far as the authors are aware W. BÖSENBERG and E. STRAND<sup>2)</sup> have described only two species, *Clubiona kurilensis* BÖS. et STRAND and *Theridium subadultum* BÖS. et STRAND from Iturup of the southern Kurile group. In addition to these STRAND<sup>3)</sup> has reported one doubtful species of the genus *Dolomedes* (?) from the same locality. SAITO<sup>4)</sup> in his report of spiders from the northern Kurile islands has listed the following twelve species: *Xysticus limbatus* KEYSERLING, *Clubiona brevipes* BLACKW., *Clubiona frutescentum* L. KOCH, *Clubiona kurilensis* BÖS. et STRAND, *Theridion formosum* (CLERCK), *Theridion araitense* SAITO, *Theridiosoma gemmosum* (L. KOCH), *Arctosa cinerea* (FABR.), *Pirata montanus* EMERTON, *Lycosa avida* WALCK., *Lycosa riparia* C. L. KOCH and *Lycosa chisimensis* SAITO.

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- 1) Contribution No. 37 from the Zoological Institute, Faculty of Science, Hokkaido Imperial University.
  - 2) W. BÖSENBERG und E. STRAND:—Japanische Spinnen. Stuttgart. 1906.
  - 3) E. STRAND:—Zool. Anz. Bd. 31, 1907.
  - 4) SABURO SAITO:—Trans. Sapporo Nat. Hist. Soc. Vol. 12, 1932.

Recently about one hundred specimens were collected by the senior author during a journey in August 1931 to two of the southern Kurile islands, namely, Shikotan and Iturup. For the sake of convenience, the species described in this paper are limited to the specimens from Iturup island. The larger number of individuals representing perhaps more genera from Shikotan will be reported in a later paper.

In this connection it is interesting to note that the general faunal characteristics of Shikotan differ widely from those of Iturup and Yezo. These differences are quite well known in respect to certain mammals and plants. It is consequently to be expected that the differences in arachnid fauna will be as marked as for other groups. In collecting spiders in Iturup one is impressed by the scarcity of even the most common forms of Japanese spiders, whereas in Shikotan, collection of numerous spiders is easily accomplished. In fact the number taken in the net was in the main greater than from an average net beating in a similar location in Hokkaido. The plentifulness of spiders correlates in a remarkable degree with the plentifulness of insects. The converse of this was true for Iturup where the bamboo grass (*Sasa kurilensis*) covers the island completely like a large harsh blanket often attaining a height of over ten feet. This is higher than the usual stand in Hokkaido. However Shikotan lacks this heavy growth in many places so that one is greeted by a more pleasant and pleasing landscape. Where the bamboo grass was growing it seldom was over waist deep, therefore penetratable. Sweeping of Shikotan island wild flowers grow in profusion forming a rich lovely blanket of vegetation. These places are usually near the coast and when swept over yield an unusually large number of spiders. In Iturup except near the borders of streams and lakes no open vegetation exists, unless it is on the very heights of the semi-extinct volcanoes. Because of this it is not surprising that the number of spiders and their frequency of distribution is much lower than in Shikotan.

The authors wish to express their heartiest thanks to Dr. K. OGUMA, Dr. T. INUKAI and Dr. TOHRU UCHIDA of this university for their kindness and cooperation. To Mr. K. MUKASA they are also greatly indebted for his help in the collection of the specimens.

Family Clubionidae

Genus *Clubiona* LATR., 1804

*Clubiona badia* n. sp.

Jap. name, *Kuriiro-fukurogumo*.

Fig. 1.

Cephalothorax of moderate breadth, not very strongly rounded on the sides, somewhat shorter than pattela+tibia of the fourth pair; its breadth is somewhat less than the length of tibia of the fourth pair, the clypeus equals  $\frac{1}{4}$  of the greatest breadth of the pars thoracica; the sides of the pars cephalica are moderately sloping, slightly rounded. Colour light brown at the pars cephalica and chestnut colour at the pars thoracica. Chelicerae deep black. Sternum yellowish brown, oval, the length about twice as long as the breadth. Labium black, representing a triangle. The anterior row of eyes is evidently shorter than the posterior row, slightly recurving; eyes equal in size and separated by an interval which is about equal to the diameter of the eye; four median eyes form a trapezoid of which the posterior side is about two times as long as the anterior side; the posterior eyes, arranged in a straight line, are less in diameter than the corresponding eyes of the anterior row; the centrals and the laterals separated by an interval about twice the diameter of the posterior eye. Legs of moderate length and strength, yellow in colour. Abdomen

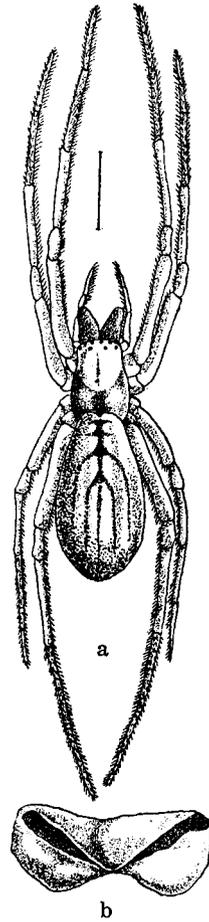


Fig. 1. *Clubiona badia* n. sp.  
a, female  
b, epigynum

of chestnut colour with a black folium; the belly paler than the back with yellow spots scattered irregularly. The measurements are as follows:—total length, 1.05 cm., length of abdomen, 0.70 cm., length of legs, I, 1.10 cm., II, 1.10 cm., III, 0.80 cm., IV, 1.20 cm.

Locality: Iturup, Rubetsu and Toshimoe, August 3, 1931.

Remarks: The species is evidently related to *Clubiona alpicola* KULCZ., known from Europe, in the form of epigynum and moreover in general structure. However it is particularly distinguishable from the European species by the chestnut colour of the abdomen.

*Clubiona perforata* n. sp. Jap. name, *Ana-fukurogumo*.

Fig. 2.

Cephalothorax rusty yellow; pars cephalica somewhat brownish; pars thoracica with grey hue along the radial and cervical grooves.

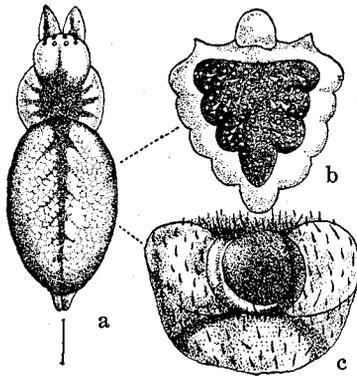


Fig. 2. *Clubiona perforata* n. s.  
a, female    b, sternum  
c, epigynum

The two rows of eyes, seen from above, are nearly straight; all eyes equal in size, posterior central eyes white, the other black; the anterior row somewhat shorter than the posterior; the centrals of the anterior row are separated from each other by an interval equal to their diameter, the distance from the laterals being evidently greater than this separation; the central eyes occupy an area which forms a trapezoid with the height longer than the basal

side and the anterior side shortest; four posterior eyes separated from each other by a space twice as great as their diameter. Chelicerae rusty yellow with deep brown claw and somewhat thicker than the coxa of the first leg, being a little longer than double the breadth. Ladium light black, rounded at tip. Sternum of near-

ly heart-shape, light black with white margin furnished with numerous small pits and six series of three small processes arranged radially, the length equal to the breadth, broadly truncated in front, legs and palpus light yellow. Abdomen ovate, the length about two times the breadth; the colour is deep yellow with a longitudinal brown stripe which ramifies grey branches; the sides dull brown; the belly yellowish black. The measurements are as follows:—total length 0.61 cm., length of abdomen, 0.45 cm. length of legs, I, 0.77 cm., II, 0.60 cm., III, 0.50 cm., IV, 0.62 cm.

Locality: Iturup, Rubetsu, August 3, 1931.

Remarks: This species resemble *Clubiona terrestris* West. in general appearance but it is easily distinguished from the above by the presence of characteristic small depressions or pits and six radial series of processes of the sternum and a large circular opening of the epigynum. In *Clubiona terrestris* the sternum is smooth and the epigynum has two small openings.

### Genus *Anyphaena* SUND., 1833

*Anyphaena kurilensis* n. sp. Jap. name, *Chisima-yabugumo*.

Fig. 3.

Cephalothorax dull yellow, without mark. Eyes equal in size, placed in two transverse rows; anterior row moderately recurved, the posterior nearly straight; posterior median eyes situated somewhat farther from each other than from the laterals, the distance between the latter being about two times the diameter of eye. In the anterior row the eyes are distributed at equal intervals from each other; the area occupied by the central eyes is trapezoid in shape, the anterior side is of the same length as the diameter of one eye. Chelicerae rather large and dull brown in colour. Labium somewhat tapering toward the broad rounded apex which is furnished with black hairs; the length is about two times the breadth. The basal segment of palpus is strongly rounded on the outer side, with a rather deep transversal depression in the middle. Palpi and legs

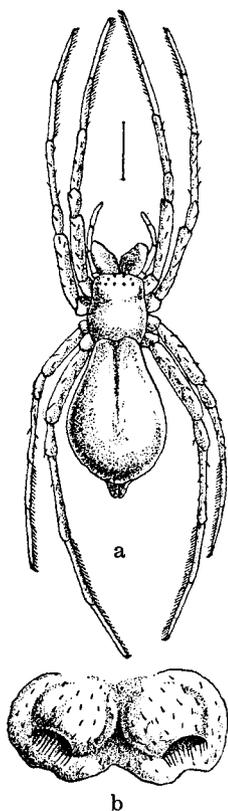


Fig. 3. *Anyphaena kurilensis* n. sp.

a, female  
b, epigynum

yellow. Sternum lengthened oval, furnished thinly with short black hairs, the length is greater than two times the breadth. Abdomen dull brown with a longitudinal deep brown line at the anterior part. Epigynum consists of a flat area truncated in front, with two semicircular openings the ridge of which is furnished with long hairs. The measurements are as follows:—total length, 0.80 cm., length of abdomen, 0.45 cm., length of legs, I, 0.65 cm., II, 0.60 cm., III, 0.55 cm., IV, 0.90 cm.

Locality: Iturup, Rubetsu and Toshimoe, August 3, 1931.

Remarks: In general appearance the present species suggests an American species, *Anyphaena celer* (HENTZ.) (= *Anyphaena incerta* KEYSERLING) and its nearly related species, but is easily distinguished in having a semicircular opening of the epigynum. It differs also in the form of the sternum. The sternum of *Anyphaena celer* is oval, broader and at the same time shorter than that of *Anyphaena kurilensis*.

#### *Anyphaena gracilis* HENTZ.

Fig. 4

*Anyphaena gracilis*, MARX, G.:—Proc. Nat. Museum. Vol. 12, 1889, p. 511; BANKS, N.:—Catalogue of nearctic spiders. Bull. 72, U. S. Nat. Museum. 1910, p. 13; COMSTOCK, J. H.:—The spider book, 1913, New York, p. 561; PETRUNKEVITCH, A.:—Bull. Amer. Museum. Nat. Hist. Vol. 29, 1911, p. 445; CROSBY, C. R. and BISHOP, S. C.:—Memoir Cornell Univ. Agr. Exper. Station New York, 1926.

*Anyphaena rubra*, EMERTON, J. H.:—Trans. Conn. Acad. Vol. 8, 1890, p. 22; —:—Common spider. Boston, 1902, p. 13.

Cephalothorax fulvous with a broad longitudinal darker band, clypeus and part of eye region dusky; anterior row of eyes straight

or nearly so, eyes subequal in size, the medians separated by about their radius farther from each other than to the laterals; posterior row of eyes a little procurved, equal-sized and nearly equidistant, or the medians slightly farther from each other than from the laterals; lateral eyes on each side contiguous. Sternum brownish yellow, representing a pitted flask-shape, truncated before and pointed behind. Labium triangular, its base equal to  $1\frac{1}{2}$  the height. Palpus furnished with a tarsal claw, and its basal segment slender, deep brown in colour. Legs slender, deep yellow and the tarsi furnished with three claws. Abdomen grey laterally, the middorsal region yellow; underside uniformly black. Spinnerets of moderate size, deep brown in colour.

Locality: Iturup, Rubetsu, August 3, 1931.

Distribution: U. S. A.

#### Family Attidae

#### Genus *Pellenes* SIMON, 1876

#### *Pellenes* sp.

An immature male which cannot be safely referred to species definition without a study of mature specimens.

Locality: Iturup, Rubetsu, August 3, 1931.

#### Genus *Wala* KEYSERLING, 1884

#### *Wala* sp.

The cephalothorax is almost flat and the part of the foremost eyes is broadest, its breadth being somewhat more than a half of the length of the cephalothorax, and narrowing backwards; the anterior part light pink with black edge and the posterior half yellow with three pairs of brown radial furrows. The interval between the margin of the clypeus and the fore central eyes is less than a half of their diameter. The length of the eye-quadrangle is slightly greater than  $\frac{1}{2}$  of the length of the cephalothorax; front

row of eyes curved strongly upward; a straight line tangent to the upper margin of the central eyes would cut the lateral eyes a little above their center; the central eyes are separated only a little, their diameter being about twice that of the laterals and they are remote from the laterals by an interval about one half the diameter of the lateral eyes. The eyes of the second row are very small, situated in the middle between the first and the third rows of eyes; the hindmost eyes are the same in diameter as the laterals of the first row. Their separation is equal to the length of the anterior row. Chelicerae short and broad, the furrow furnished with only one tooth. Legs white, without mark, tibia and patella of the third leg shorter than the those of the fourth leg. Sternum yellow, oblong oval, pointed behind and truncated front; its breadth is about  $\frac{2}{3}$  the length. Abdomen yellow with a whitish part at the anterior back and two pairs of brownish lines at the posterior part; a band of the same colour at the edge of this white part. The measurements are as follows:—total length, 0.25 cm., length of abdomen, 0.15 cm.

Locality: Iturup, Rubetsu and Toshimoe, August 3, 1931.

#### Family Linyphiidae

#### Genus *Linyphia* LATR., 1804

#### *Linyphia marginata* C. L. KOCH.

Fig. 5

*Linyphia marginata*, BREMEN, R.:—Die Tierwelt Mittel Europas, p. 73, fig. 813, 814; THORELL, T.:—Remarks on Synonyms of European Spiders. Upsala, 1870–1873, p. 51; OTTO, H.:—Ungarns Spinnen-Fauna, Budapest, 1879, p. 58; SIMON, E.:—Arachnides de France, Paris, Tome 5, 1881, p. 231; MARX, G.:—Proc. United States Nat. Museum, 1890, Vol. 12, No. 782, p. 528; BÖSENBERG, W.:—Spinnen Deutschlands, Stuttgart, 1901, p. 67, taf. 5, fig. 66; EMERTON, J. H.:—Common Spiders, Boston, 1902, p. 136, fig. 319, 320; BÖSENBERG, W. und STRAND, E.:—Japanische Spinnen, Stuttgart, 1905, p. 173, taf. 10, fig. 192; BANKS, N.:—Bull. Smithsonian Institution United States Nat. Museum, 72, 1910, p. 33; PETRUNKEVITCH, A.:—Bull. Amer. Museum Nat. Hist. Vol. 29, 1911, p. 525; CROSBY, C. R. and BISHOP, S. C.:—Memoir Cornell Univ. Agr. Exper. Station, 1926, p. 1048.

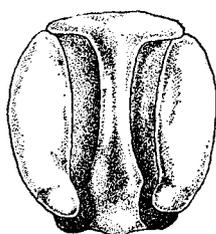


Fig. 4. *Anyphaena gracilis* HENTZ. epigynum.

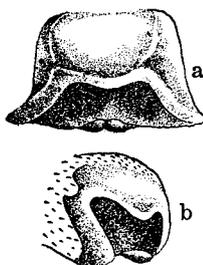


Fig. 5. *Linyphia marginata* C. L. KOCH.

a, front-view of epigynum.  
b, side-view of epigynum.

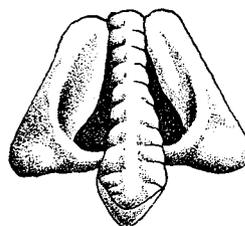


Fig. 6. *Araneus thaddeus* (HENTZ.) epigynum.

Cephalothorax light brown with a longitudinal blackish brown band; the width is two thirds of the length. The basal segment of palpus triangle is deep brown while the tip is light brown. Labium blackish brown, triangular in shape the height of which is one third of the basal length. Chelicerae and sternum black, the latter pear-shape, broadest at the place between the second coxae, which is about  $\frac{1}{2}$  the length. The anterior row of eyes, seen from above, is slightly recurved and the posterior row is nearly straight; the anterior central eyes are slightly smaller than the others which are all equal in size; the area occupied by four central eyes forms an oblong of which breadth is somewhat shorter than the length and about three times as long as the diameter of the posterior central eyes; the lateral eyes of both rows are almost in contact with each other. Palpi and legs light yellow without markings, and the hairs and spines very fine and almost invisible. Abdomen light yellow with a dark stripe in the middle part; the sides light black; the under side yellowish black at the anterior part, the posterior part and the spinnerets black with two yellow stripes from both sides of spinnerets to the spiracles. The measurements are as follows:—total length, 0.45 cm., length of abdomen, 0.35 cm., length of legs, I, 0.65 cm., II, 0.65 cm., III, 0.35 cm., IV, 0.55 cm.

Locality: Iturup, Rubetsu and Toshimoe, August 3, 1931.

Distribution: Europe, U. S. A., Japan (Nagasaki, Kompira).

## Family Argiopidae

Genus *Araneus* CLERCK, 1757*Araneus patagiata* CLERCK.

*Araneus patagiata*, KOCH, L.:—Arachniden aus Sibirien u. Novaja Semlja. Stockholm, 1879, p. 7; BÖSENBERG, W.:—Die Spinnen Deutschlands, Stuttgart, Heft 35, 1901, p. 36; CROSBY, C. R. and BISHOP, S. C.:—Memoir Cornell Univ. Agr. Exper. Station, 1926, p. 1053; SAITO, S.:—Annotationes Zool. Japonenses, Vol. 13, 1932, p. 380.

*Araneus patagiatus*, PETRUNKEVITCH, A.:—Bull. Amer. Museum Nat. Hist. Vol. 29, 1911, p. 308; RABELER, W.:—Zeitschr. f. Morph. u. Oekol. d. Tiere. Bd. 21, 1931, p. 198.

*Aranea patagiata* THORELL, T.:—Remarks on Synonyms of European Spiders, Upsala, 1870–1873, p. 16.

*Epeira patagiata*, ZIMMERMANN, H.:—Die Spinnen der Umgegend von Niesky, p. 77; THORELL, T.:—Om CLERCKS original-Spindelsamling, Oefvers, af K. Vet.-Akad. Förh., d. 17, 1858, p. 146; SIMON, E.:—Arachnides de France, Paris, Tome 1, 1874, p. 110; THORELL, T.:—Südrussischer Spinnen, St. Petersburg, 1875, p. 16; CHYZER, C. et KULCZYNSKI, L.:—Araneae Hungariae, Budapest, Tome 1, 1892, p. 113, Taf. 2, fig. 22.

*Epeira ocellata*, BANKS, N.:—Bull. United States Nat. Museum, Vol. 72, 1910, p. 43.

The species is a widespread form in Eurasia as well as in the northern half of the western hemisphere as Saito has described in detail (1932). The measurements (in centimeters) are as follows:—

	Total length	Abdomen	Leg I	Leg II	Leg III	Leg IV
Male I	0.70	0.55	0.80	0.75	0.50	0.70
Male II	0.60	0.45	0.85	0.75	0.50	0.61
Male III	0.55	0.45	0.65	0.60	0.45	0.55
Female I	1.20	0.90	1.55	1.42	0.90	1.27
Female II	0.97	0.70	1.22	1.12	0.78	1.05
Female III	0.85	0.60	1.37	1.23	0.86	1.17

Locality: Iturup, Rubetsu, August 3, 1931.

Distribution: Saghalien, Siberia, Europe, U. S. A., Alaska, Labrador, Newfoundland, Anticosti Island.

*Araneus thaddeus* (HENTZ.).

Fig. 6.

*Epeira thaddeus*, MARK, G.:—Proc. Nat. Museum, Washington, 1889, Vol. 12, p. 548; EMERTON, J. H.:—Common Spiders, Boston, 1902, p. 170; BANKS, N.:—Bull. United States Nat. Museum, Vol. 72, 1910, p. 44.

*Epeira baltimorensis*, KEYSERLING, E.:—Verhandl. d. K. K. zool. bot. Ges. Bd. 29, 1879, p. 308, taf. 4, fig. 8.

*Araneus thaddeus*, PETRUNKEVITCH, A.:—Bull. Amer. Museum Nat. Hist. Vol. 29, 1911, p. 319.

*Aranea thaddeus*, COMSTOCK, J. H.:—The spider book, New York, 1913, p. 490, fig. 519–523; CROSBY, C. R. and BISHOP, S. C.:—Memoir Cornell Univ. Agr. Exper. Station, 1926, p. 1051.

Cephalothorax deep brown, flattened oval with a prominent cervical groove, rounded on the sides, with the pars cephalica rather large and high. Eyes placed in two transverse rows close to the anterior margin of the caput; anterior row slightly recurved, the posterior nearly straight; posterior median eyes situated closer to each other than to the laterals, the interval between the former being just the same as the diameter of the eye; four median eyes form a trapezoid of which the anterior side is somewhat shorter than the posterior; lateral eyes of both rows in contact. Chelicerae of moderate size, deep yellow in colour. Claw black. Labium triangular of which the basal side is longer than the height. Sternum of heart shape, deep yellow in colour, the region of the second coxa broadest, narrowing backward so that the fourth coxae contact with each other. Legs deep brown and darker toward the ends. Abdomen ovate, back white with a trace of black markings on the hinder part, the sides yellowish white, belly yellow with black network and four bright yellow patches at the region around the spinnerets which are black. Epigynum forms long and thick protuberance directed backward, strongly convex below; the length of the protuberance is about three times the breadth at its extreme apex. The measurements are as follows:—total length, 0.75 cm., length of abdomen, 0.65 cm., length of legs, I, 0.75 cm., II, 0.75 cm., III, 0.45 cm., IV, 0.60 cm.

Locality: Iturup, Rubetsu, August 3, 1931.

Distribution: U. S. A.

## Family Micryphantidae

Genus *Araeoncus* SIMON, 1884*Araeoncus humilis* (BLACKW.).

Fig. 7

*Araeoncus humilis*, BREMEN, C. FR.:—Die Tierwelt Mitteleuropas. Leipzig, Bd. 3, p. 105, fig. 1177; SIMON, E.:—Les Arachnides de France, Paris, Tome 5, 1884, p. 636, fig. 460–462; SIMON, E.:—Ibid. Tome 6, 1926, p. 367, fig. 650; BÖSENBERG, W.:—Die Spinnen Deutschlands, Stuttgart, Bd. 3, 1902, p. 195, taf. 17, fig. 269.

*Erigone humilis*, THORELL, T.:—Remarks on Synonyms of European Spiders, Upsala, 1870–1873, p. 116, 452.

*Diplocephalus humilis*, CHYZER, C. et KULCZYNSKI, L.:—Araneae Hungariae, Budapest, Tome 2, 1894, p. 111, tab. 4, fig. 23.

Cephalothorax brownish yellow, pars cephalica clumsy, raising up antero-dorsally and lighter than pars thoracica with brown radial furrows. Anterior row of eyes a little recurved; the median small, separated from each other by about their diameter and almost an

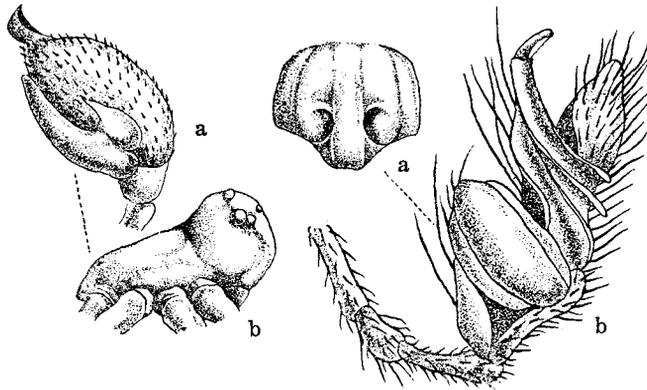


Fig. 7. *Araeoncus humilis*  
(BLACKW.)

a, pedipalpus of male.  
b, lateral view of  
cephalothorax.

Fig. 8. *Tetragnatha extensa*  
LIN.

a, epigynum.  
b, pedipalpus of male.

equal distance from the laterals; posterior eyes in a straight line, equal in size; the diameter of median eyes about twice diameter of the anterior medians and separated from each other by nearly their diameter; lateral eyes on each side contiguous Chelicerae and

labium light brown; labium broader than two times the length. The width and the length of the sternum nearly equal, heart-shaped, somewhat blunt behind. The colour of the sternum is deep brown with a black stripe along the edge. Palpi and legs slender, brownish yellow. Abdomen black. The measurements are as follows:—total length, 0.25 cm., length of abdomen, 0.17 cm.

Locality: Iturup, Rubetsu, August 3, 1931.

Distribution: Europe.

### Family Tetragnathidae

### Genus *Tetragnatha* LATR., 1804

#### *Tetragnatha extensa* LIN.<sup>1)</sup>

Fig. 8.

*Tetragnatha extensa*, ZIMMERMANN, H.:—Die Spinnen der umgegend von Niesky, p. 82; BREMEN, C. FR.:—Die Tierwelt mitteleuropas, Leipzig, Bd. 3, p. 118, taf. 25, fig. 1332; THORELL, T.:—Oefvers. af K. Vet.-Akad. Förh. Bd. 17, 1858, p. 147; BLACKWALL, J.:—Ann. Mag. Nat. Hist. Vol. 5, 1870, p. 404; THORELL, T.:—Remarks on Synonyms of European Spiders, Upsala, 1870–1873, p. 40; SIMON, E.:—Les Arachnides de France, Paris, Tome 1, 1874, p. 155; THORELL, T.:—Südrussischer Spinnen, Petersburg, 1875, p. 20; OTTO, H.:—Ungarns Spinnen-Fauna, Budapest, Bd. 3, 1879, p. 46; KOCH, L.:—Arachniden aus Sibirien und Novaja, Semlja, Stockholm, 1879, p. 7; LUDWIG, H.:—Thierkunde, Bd. 2, 1886, p. 588; MARX, G.:—Proc. Nat. Museum, Washington, 1889, Vol. 12, p. 552; BÖSENBERG, W.:—Die Spinnen Deutschlands, Stuttgart, Bd. 1, 1901, p. 59, taf. 4, 5, fig. 55; BANKS, N.:—Proc. Nat. Museum, Vol. 25, 1903, p. 215; —:—Bull. United States Nat. Museum, Vol. 72, 1910, p. 37; COMSTOCK, J. H.:—The Spider Book, New York, 1913, p. 411; KULCZYNSKI, V.:—Araneae et Oribatidae Expeditionis in Siberiam Arcticam Occidentalem, Petrograd, 1916, p. 21; BABELER, W.:—Zeitschr. f. Morph. u. Oekol. d. Tiere., Bd. 21, 1931, p. 206; CROSBY, C. R. and BISHOP, S. C.:—Memoir Cornell Univ. Agr. Exper. Station, 1926, p. 1057.

*Aranea extensa*, FABRICIUS:—Entomologica Systematica, Tome 2, 1793, p. 407.

Cephalothorax greyish yellow; the pars thoracica with a median stripe, a little dusky, especially on the sides. Sternum deep brown or black with a little brown or yellow wedge-fleck, its length a little

1) W. BÖSENBERG and E. STRAND (1905) described a specimen collected in Japan proper under the name *Tetragnatha lea* BÖS. et STRAND. Strictly speaking the present specimens show the intermediate form between the European form and the above species, but the form of epigynum, the length of chelicerae and the wedge-fleck of sternum have an aspect rather nearer the European than the Japanese species.

greater than  $1\frac{1}{2}$  the width, narrowing suddenly at the space between the third coxae. Chelicerae strong, yellow in colour; the claw-furrow is armed on the anterior margin with seven teeth in female, first somewhat stronger than the following, removed from the second by a very long toothless space, the second placed opposite to the fourth tooth of the posterior margin. Basal segment of palpus yellow, the width being one third the length, its length a little shorter than  $\frac{1}{2}$  the length of the chelicerae. Labium blackish brown with a brown apex. Eyes equal in size, arranged in two slightly recurved rows; lateral eyes of both rows separated from each other by a distance greater than their radius, and their interval a little smaller than that between the medians of both rows; four posterior eyes equidistant, separated by nearly their diameter. Legs slender, yellow in colour. Abdomen clear silver with a sepial folium; underside sepia with a longitudinal median black band intervening between two silver stripes. The measurements (in centimeters) are as follows:—

	Total length	Length of abdomen
Male I	0.50	0.25
Male II	0.50	0.35
Male III	0.57	0.45
Male IV	0.60	0.35
Female I	0.65	0.46
Female II	0.70	0.50
Female III	0.76	0.52
Female IV	0.80	0.55
Female V	0.83	0.58
Female VI	0.90	0.60

Locality: Iturup, Rubetsu and Toshimoe, August 3, 1931.

Distribution: Tropical, temperate and subarctic countries; Europe, Siberia, Sicily, U.S.A., Canada, Alaska, Labrador, British Columbia.