# A N N A L E S Z O O L O G I C I 

Tom XXVIII
Nr 11

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## Redescriptions of the A. E. Grube's East Siberian species of Salticidae (Ara$n e i$ ) in the collection of the Wroclaw Zoological Museum

[With 39 figures in the text]
Spider collections from several East Siberian expeditions in the middle of the XIXth century were sent to A. E. Grube, who identified and described a number of species. Results were published in 1861 and consisted of short diagnoses of the new species and only a bare summary of zoogeographic character of other material with only a few names of already known species mentioned. From among the Salticidae Grube described 13 new species and mentioned 2 other already known. As the original descriptions were definitely insufficient and there were no drawings, 9 of Grube's Salticidae species remained a mystery - never found again and never revided, still quoted in various catalogues (Retmoser, 1919, Charttonov, 1932, Roewer, 1954, Bonnet, 1955-1959) under their original outdated names. From the remaining 4 species 3 were identified by Kulczyński (1895), who 34 years later has studied a new material from the same area and one, apparently falsely, by L. Koch (1879).

Owing to the courtesy of Dr. A. Wiktor, curator of Invertebrates in Zoological Museum Wroclaw University and his wife Mag. J. Wiktor, original collection of Grube was recently discovered among old museum materials and set in a provisional order. That enabled me to study Salticidae East Siberian collection consisting of 21 vials.

The state of preservation of the collection after more than a hundred years of storage is poor, especially that specimens were stored in small individual bottles with cork stoppers and with labels glued to the outer surfaces of the bottles - an arrangement which in the stormy history of the Museum proved to be everything but safe way of preservation of valuable specimens. The condition of the collection does not suggest that much care has been given to it since Grube has studied it. Some specimens were dry, other partly macerated and often mutilated. Labels were incomplete and barely legible. After careful work
all remnants were secured and preserved in new $75 \%$ ethyl alcohol in new vials, labels were copied and placed into specimen vials. Old labels are preserved.

The collection consists of types of 9 identifiable and 2 unidentifiable species. There are also 5 species identified by Grube and 3 vials with unidentifiable remnants of three more species.

The identification of types appeared to be particularly difficult and tricky because of poor labels, often labelled with names different from those published in original description. Some of these names have, however, similar meaning to the name published and in every case the coincidence of collecting place, collector's name, sex of the specimen and preserved traces of characters described by Grube permitted to identify the type. The most striking example of that was identification of Attus arenicolor type. There were three vials labelled with two slightly different Latin names meaning "pale" ${ }^{1}$ and the meaning of the name "arenicolor" or "sand coloured" is to certain extent comparable. This is of course not a sufficient proof of identity by itself but the description mentions three different collecting places and two collectors, and these agree with names written on labels. This is a sufficient proof of identity. The change of the first specific name invented by an author during preparation of description was quite common hundred years ago and happens even now, it is quite a "natural" kind of mistake.

Some identification are less sure and that is mentioned in remarks preceding descriptions.
All Grube's specimens are kept in the collection of the Zoological Museum of the University of Wroclaw, ul. Sienkiewicza 21, Wroclaw, Poland. Other specimens are kept in the collection of the Institute of Zoology, Polish Academy of Sciences, ul. Wilcza 64, Warszawa, Poland.

## I. Attus dimidiatus Grube, 1861

The specimen is lacking in the collection and as the original description is insufficient, it can not be identified. I propose that the description should be considered void and the specific name rejected.

## II. Attus fuscostriatus Grube, 1861

The specimen has disappeared from its vial, so there is no possibility to find out what it could be, similarly as in the previous species. The description should be therefore considered void and the specific name rejected.

## III. Attus quadrifasciatus Grube, 1861

Material: 1 juvenile of "Attus quadrifaciatus Gr.[UBE] [Holotypus] [leg.] MAAck, Wiluj [Vilyuy River, Siberia, USSR]" coll. Zool. Mus. Wrocław.

I do not see any justification for establishing a new species on the basis of a single immature specimen. There is no possibility to identify the species this specimen should be classified to - therefore the description of this species

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should be considered void and the name rejected. L. Koch (1879) has identified a specimen from Krasnoyarsk (Siberia) as identical with Attus quadrifasciatus and has reclassified it into genus Philaeus Thorell, 1869 as Philaeus quadrifasciatus (Grube, 1861). Unfortunately he has not given any reason for that identification and has not given any description of his specimen. Therefore his identification remain doubtful.

## IV. "Attus" arenicolor Grube, 1861

Material: 1才 "Attus [unpublished Latin name meaning "pale"] Gr[Ube] [leg.] Dittmar, Amur"; 1 juv. 우 "Attus [unpublished Latin name meaning "pale"] Gr[Ube] [leg.] Schrenck, Chungar" (presumably "Chungare", close to present locality Otu on Amur between Sungari and Ussuri in the Chinese province Heilungkiang); 1 juv. of "Attus [unpublished Latin name meaning "pale"] Gr[Ube] [leg]. Maack, Amur" - all specimens - coll. Grube, Zool. Mus. Wroclaw.

Presumed synonym: Sitticus bilineatus Saito, 1939, syn. n. ${ }^{1}$
Remark. Owing to unsatisfactory state of Salticidae taxonomy I abstain temporarily from classification of this species into proper genus. It is not a Sitticus and rather may be a Menemerus or genus related to Menemerus. Let's wait for the further research.

## Description of male

The colouration is completely changed now and state of preservation so poor, that there is no possibility to describe external appearance of the specimen. Length of cephalothorax is 1.54 , length of eye field 0.65 , width of eye field I 0.94 , width of eye field III 0.90. Ratios: $a-0.42, b-1.04, c-0.70$. Cheliceral inner posterior margin with a single tooth, inner anterior with 2 small teeth (fig. 1).

Copulatory organ elongated and narrow, the anterior tip of the bulbus drawn to the front and ends with a claw-like embolus (figs. 2, 3). Tibia short, tibial apophysis short and thin, bent ventrally (figs. 4-6).

Length of legs: I $0.49+0.69+0.74+0.53+1.06$, II $0.44+0.62+0.58+0.42+$ +0.87 , III $0.48+0.81+0.67+0.62+0.88$, IV $0.51+0.92+0.80+0.44+1.06$. Ratio $d-1.18 .^{2}$

[^1]

Figs. 1-6. "Attus" arenicolor Grube, 1861, holotype. 1 - cheliceral dentition. 2-5 - male copulatory organ: 2 - ventral view, 3 - dorsal view in the same position as Saito's Sitticus bilineatus fig. 217 b, 4 - dorso-lateral view, 5 - lateral view, 6 - tibial apophysis - ventral view.

## V. Aelurillus festivus (C. L. Kосн, 1834)

Synonyms: Attus melanotarsus Grube, 1861, syn. n., Aelurillus festivus: Kulczyński, 1895 et auctores, Phlegra pichoni Schenkel, 1963, [?] syn. n. ${ }^{1}$


Figs. 7-9. Aelurillus festivus (C. L. Kосн, 1834), male copulatory organ: 7 - lateral view, 8 - ventral view, 9 - tibial apophysis, ventral view.

[^2]Material: $1^{*}$ "Attus melanotarsus Gr.[Ube] Stanowoigeb. ${ }^{1}$ " Holotype. Coll. Grube, Zool. Mus., Wroclaw.

Remark. The specific names in the genus Aelurillus Simon, 1884, and especially $A e$. festivus (C. L. Косн, 1834) were badly confused by various authors. Name Aelurillus festivus (C. L. Kосh, 1834) is used here in the same sense as by Chyzer and Kulczyński (1891) and M. Dahl (1926). Simon (1937) gives description and drawing of proper male but connects it with a wrong female. I shall discuss these problems more broadly in a separate paper, now in preparation.

## Description of male

The dark coloration of the specimen is faded now and reduced to an yellow-ish-grey, no colour pattern can be found now. Length of cephalothorax is 3.82 , length of eye field 1.26 , width of eye field I 1.80 , width of eye field III 1.71. Ratios: $a-0.33, b-1.53, c-0.70$.

Chelicerae have single tooth on inner posterior margin. Pedipalpal femur without protuberance. Copulatory organ typical for Ae. festivus (C. L. Kосн) (figs. 7-9).

Length of segments of legs: I $0.76+0.76+0.99+0.99+1.89$, II $0.72+0.85+$ $+0.90+1.03+1.89$, III $0.94+1.57+1.30+1.21+2.38$, IV $0.99+1.89+1.44+$ $+1.12+2.47$. Ratio $d-1.10$

## VI. Dendryphantes fusconotatus (Grube, 1861), comb. n.

Synonym: Attus fusconotatus Grube, 1861.
Material: 1 of "Attus [unpublished Latin name meaning "spotted"] Gr[ube] [leg.] Mafck, Amur". Holotype, Coll. Grube, Zool. Mus. Wrocław.

## Description of male

The soft tissues are shrunken and original coloration disappeared. The general apperance and proportions resemble male Dendryphantes. Length of cephalothorax 2.70 , length of eye field 1.16 , width of eye field I 1.50, width of eye field III 1.73. Ratios: $a-0.43, b-0.87, c-0.77$. Length of abdomen 2.70.

Chelicerae with single large tooth on inner posterior margin and one large and one minute teeth on the inner anterior margin (fig. 10).

Copulatory organ (figs. 11, 12) resembles quite closely that of Dendryphantes thorelli KulczyŃski, 1895, but differs in proportions and shape of the stylus and conductor.

Length of segments of legs: I $0.79+1.16+1.36+1.36+1.87$, II $0.62+$

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Figs. 10-12. Dendryphantes fusconotatus (Grube, 1861), holotype. 10 - cheliceral dentition 11-12 - male copulatory organ, lateral and ventral views.
$+0.68+0.79+0.82+1.39$, III $0.68+0.85+0.71+0.74+1.42$, IV $0.68+1.08+$ $+0.99+0.85+1.68$. Ratio $d-1.40$.
VII. Euophrys flavoatra (Grube, 1861), comb. n.

Synonym: Attus flavoater Grube, 1861.
Material: 1 oc "Attus [unpublished Latin name meaning "brownish-black"] Gr[UBE] [leg.] Schrenck, Nikolajevsk [Nikolayevsk-na-Amure]". Holotype. Coll. Grube, Zool. Mus. Wrocław.

## Description of male

Cephalothorax dark brown, now entirely bald. Length of cephalothorax 1.86 , length of eye field 0.76 , width of eye field I 1.13, width of eye field III 1.10. Ratios: $a-0.41, b-1.03, c-0.67$. Abdomen dark brown, folded and contracted now. Dorsal part of abdomen remains unfolded and its margins are slightly bent ventralwards - due to bigger hardness and stiffness of the sclerotized cuticule which seems to be modified into sclerotized shield-scutum, resembling that in Chalcoscirtus infimus (Simon, 1868). Ventral surface contracted and folded, brown. Length of abdomen 1.59.

Sternum and coxae dark brown. Maxillary plates and labium dark brown, white tipped. Chelicerae greyish-brown, ventrally paler. There is a single tooth on inner posterior and one on inner anterior margin (fig. 15), and it is that dentition which does not permit to classify that species into genus Chalcoscirtus Bertkau, 1880.

Pedipalps pale yellow, copulatory organs very indistinctly visible. There is a very thin and barely visible long tibial apophysis (fig. 13). Stylus bent into small circle in the anterior part of the bulbus, internal canal bent into three consecutive loops (figs. 13-14). The shape of the copulatory organ resemble both Chalcoscirtus and some Euophrys species.

Legs I and II blackish-brown with pale yellow tarsi. There is a brush of long, flattened and broad reddish-brown setae along the ventral surfaces of tibia and patella I, a few similar setae can be seen on a ventral surface of tibia II. Legs III and IV pale yellow. Stout and long numerous spines on all legs. Length of segments of legs: I $0.53+0.58+0.81+0.62+1.10$, II $0.37+0.55+$ $+0.60+0.53+1.01$, III $0.48+0.78+0.74+0.53+1.15$, IV $0.62+1.15+1.04+$ $+0.62+1.38$. Ratio $d-1.40$.

## VIII. Marpissa nobilis (Grube, 1861), comb. n .

Synonym: Attus nobilis Grube, 1861.
Material: 2 đở "Attus nobilis Gr[Ube] [leg.] Schrenck, Ussuri" - 1 of lectotype, 1 of (without abdomen) paralectotype. Coll. Grube, Zool. Mus. Wrocław.

Remark. Copulatory organ of this species resembles quite well original drawings of Marpissa salsophila Tystschenko, 1965 [synonymized by Nementz (1967) with Mithion canestrinii (NinNI, 1868)] from which it differs in more slim shape of tibial apophysis. Grube's species cannot be, however, classified into genus Mithion because of its typical eye field proportions - $1 / 3$ broader than long - which ratio in Mithion is only $1 / 5$ (Simon, 1937). I am not sure, however, whether that character can be relied upon. The resemblance of copulatory organs is too striking to agree that these species belong to different genera. I would be glad to see the result of a full and methodically sophisticated revision of all concerned species in both genera.

The features of this species match Simon's key (1897) quite well. An unidentate jumping spider with petiolus hidden beneath the anterior margin of abdomen, the bases of coxae III and IV almost touching and a relatively large


Figs. 13-15. Euophrys flavoatra (Grube, 1861), holotype. 13-14 - male copulatory organ, ventral and ventro-lateral views, 15 - cheliceral dentition.
tooth on inner posterior margins of chelicerae. Tibia + patella III are shorter than the same segments on leg IV. Eyes II located in the middle between eyes I and III. Sternum narrowed anteriorly with coxae I almost touching and covering basal parts of elongated maxillary plates. Cymbium has a characteristic fold on inner lateral surface articulating with a long, slim and terminally bent semitransparent apophysis of the tibia. There is also a small sclerotized and semitransparent plate-like apophysis of the cymbium located in the middle of the fold, projecting towards the tibial apophysis and also articulating with it (figs. 16-18).

The species differs from other Marpissa species reported from the East Palearctic Region [M. dybowskii Kulczyński, 1895 and M. pomatia (WalckeNAER, 1802)] in having narrow and slim cymbium.

## Description of male

Cephalothorax elongated and low, dark brown with traces of spots of white setae on the level of eyes II and behind eyes III. Length of cephalothorax (first figure - lectotype, second - paralectotype) 3.01-3.10, length of eye field 1.03-1.08, width of eye field I 1.57-1.53, width of eye field III 1.57-1.53. Ratios: $a 0.34-0.35, b 1.00-1.00$, e $0.66-0.71$.

Abdomen elongated and slim, dorsally brownish-grey now, with remnants of white scales on the anterior tip and 2 pairs of small spots of white scales in the middle and near the end of the abdomen. With exception of scarce remnants of reddish-brown setae, the abdomen is bald now. Ventrally dark grey. Length of abdomen 4.50 (lectotype).

Sternum brown, oval, narrowed anteriorly. Coxae dark brown, the I broad and robust, III and II almost touching with their bases but aligned in different directions. Maxillary plates and labium dark brown with paler tips. Chelicerae elongated, dark brown with single tooth on inner posterior and at least one on inner anterior margin (fig. 19).

Pedipalps flattened, brown with end of cymbium yellowish. Copulatory organ and tibial apophysis (figs. 16-18) are already described in the definition of the species.

Legs brown with femora I-IV dark brown. Legs I, especially tibia I, markedly elongated. Spines robust and short are quite numerous, there are 5 pairs of them on tibia I. Length of segments of legs: I 0.99-0.99+1.84-2.34+2.65-2.92+ $+1.53-1.80+2.52-2.92$, II (lectotype only) $0.72+0.94+1.03+1.81+1.44$, III $0.72-0.72+0.99-1.21+0.90-0.99+0.85-0.94+1.35-1.62$,IV $0.67-0.67+1.30-$ $-1.53+1.44-1.62+0.94-1.03+1.75-2.07$. Ratio $d 1.60-1.64$.

## IX. Pellenes ignifrons (Grube, 1861)

Synonym: Attus ignifrons Grube, 1861.
Pellenes ignifrons: KulczyŃski, 1895 et auctores.
Material: "Attus ignifrons Gr[UBE] ㅇ [leg.] MaAck, Wilui [Vilyuy River, Siberia]" -


Figs. 16-19. Marpissa nobilis (Grube, 1861), holotype. 16-17 - male copulatory organ, ventral and lateral views, 18 - anterolateral view on tibial apophysis and small cymbial apophysis articulating with it, 19 - cheliceral dentition.

1 ㅇ - syntype. Coll. Grube, Zool. Mus. Wrocław. 8 đ̊ず, 7 우 Pellenes ignifrons "S. 10 " "144" [Kultuk]. Coll. W. Kulczyński, IZ PAN-Warszawa.

Remark. As the condition of the syntype is rather poor I combined its redescription with redescription of the Kulczyński's specimen and added redescription of the male. The geographical range of that species is quite wide - Grube's specimen came from the River Vilyuy area (North-East Siberia, USRR, somewhere between $62^{\circ}$ and $63^{\circ} \mathrm{N}$ ), KuLczyński's specimen from Kultuk on the SW end of the Lake Baikal and Sowerby (1930) has reported it from Manchuria (the latter report has not been checked).

Description of female (combined syntype and Kulczyński's specimen)
Cephalothorax brown with eye field dark brown, clypeus covered with stout orange setae. Length of cephalothorax (syntype specimen only) 2.88,


Figs. 20-23. Pellenes ignifrons (Grube, 1861), female, 20 - abdominal pattern, KulCZYŃSki's specimen, 21-22 - genital organs before and after maceration, syntype specimen, 23 - the same, rigth spermateca.
length of eye field 1.17, width of eye field I 1.62, width of eye field III 1.70 . Ratios: a 0.41, b 0.95, c 0.72 .

Abdomen dorsally brown with a chain of a few triangular white spots along the mid-line in the posterior half of the abdomen; two pairs of indistinct diagonal white lines on the lateral surfaces (fig. 20). There are traces of that pattern on the syntype specimen. Ventrally brownish-grey with two pale longitudinal lines. Length of abdomen 4.05.

Epigynum oval with two grooves separated by a median ridge, spermathecae in a form of heavily sclerotized spherical vesicles, copulatory openings lead directly into sphermathecae, without any distinct copulatory canals (figs. 21-23).

Sternum dark brown. Coxae brown or fawn, the I is darker. Maxillae and labium brown, white tipped. Chelicerae dark brown with a single tooth on inner posterior margin. Pedipalps pale fawn.

Legs brown. Length of segments of legs: I $0.42+0.84+1.17+1.12+1.68$, II $0.70+0.70+0.84+0.87+1.40$, III $0.75+1.12+1.15+1.31+2.01$, IV $0.92+$ $+1.26+1.15+0.92+1.96$. Ratio $d 1.00$.

## Description of male

Cephalothorax brown with eye field dark brown. Clypeus covered with short orange setae. Length of cephalothorax 2.63 , length of eye field 1.06, width of eye field I 1.37, width of eye field III 1.45. Ratios: $a 0.40, b 0.94, c 0.77$.

Abdomen dorsally greyish-brown with a colour pattern comparable to that of female (fig. 20) but there is only a single pair of short diagonal white lines on the lateral surfaces. Ventrally fawnish-brown. Length of abdomen 2.91.

Sternum brown. Coxae pale brown with anterior ones somewhat darker. Maxillae and labium brown, white tipped. Chelicerae dark brown with a single tooth on the inner posterior margin.

Copulatory organ robust with a strong and terminally flattened conductor. Tibial apophysis short and tooth-like (figs. 24-27).

Legs uniformely brown with femur and patella I darker. Tibia and patella I elongated. ${ }^{1}$ Length of segments of legs (single specimen): I $0.81+1.01+1.51+$ $+1.17+1.87$, II $0.59+0.70+0.73+0.75+1.26$, III $0.67+0.98+1.01+0.89+$ +1.68 , IV $0.61+1.12+1.01+0.73+1.59$. Ratio $d 1.00$.

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Figs. 24-27. Pellenes ignifrons (Grube, 1861). Male copulatory organ: ventral, dorsal and two lateral views.

## X. Pellenes striatipes (Grube, 1861), comb. n.

Synonym: Attus striatipes Grube, 1861.
Material: 1 ot "Attus [unpublished but similar Latin name] Gr[ube] [leg.] Schrenck, Nikolajevsk [Nikolayevsk-na-Amure]" - holotype. Coll. Grube, Zool. Mus. Wrocław.

Remark. I classify this species into the genus Pellenes Simon, 1876 provisionally because of resemblance in copulatory organ structure to some Pellenes species but there are also some analogies to the genus Evarcha Simon, 1902. This classification should, however, be tested on new, better preserved specimens.

## Description of male

Specimen badly damaged, all parts separated, soft tissues shrunken, colours changed.

Length of cephalothorax 2.70, length of eye field 1.14, width of eye field I 1.70, width of eye field III 1.68. Ratios: $a 0.42, b 1.02, c 0.67$. Length of abdomen 2.98 .

Chelicerae have single tooth on inner posterior margin.
Copulatory organ has a short and robust stylus and no conductor. Tibial apophysis quite robust (figs. 28-29).


Figs. 28-29. Pellenes striatipes (Grube, 1861). Copulatory organs of the holotype.
XI. Pseudicius vulpes (Grube, 1861), comb. n.

Synonyms: Attus vulpes Grube, 1861, Pseudicius orientalis Kulczyński, 1895, syn. n.
Material: 1 ơ "Attus vulpes Gr[UBe] Irkutsk, [leg.] MAACK" - holotype. Coll. Grube, Zool. Mus. Wroclaw. 1 d九, 1 if "Pseudicius orientalis "" $\mathrm{U}_{1}$ " [Ussuri] "9" [leg. B. Dybowski], Syntypes - coll. W. Kulczý́ski, IZ PAN-Warszawa.

Remark. Male copulatory organs in both Attus vulpes Grube, 1861 and Pseudicius orientalis KULCZYŃSKI, 1895: figs. 13, 14 are identical so I have no doubts that both specimens are conspecific. Following Kulczyński's classification I place Attus vulpes into the genus Pseudicius Simon, 1885 and consider name Pseudicius orientalis Kulczyński, 1895 a junior synonyme of Pseudicius vulpes (Grube, 1861), comb. n. I add also redescription of female based on Kulczyński's specimen.

The trouble is, however, that I can not prove yet that classification of this species into genus Pseudicius Simon, 1885 is rigth. Both keys for identification of subfamilies or groups of genera - Simon's (1901) and its modified version by Petrunkevitch (1928) lead to nowhere. In accordance with Simon's key the posterior margin of the cephalothorax in the specimens studied is hidden beneath the abdomen, coxae I and II touch themselves, inner posterior margin of chelicerae is armoured with a single, large tooth (fig. 34). tibia + patella III are shorter than the same segments on leg IV. However, eyes II are situated halfway approximately between eyes I and III and this character leads to group Evophrydae which does not match the features of the studied species. The assumption of the opposite character - eyes II nearer to eyes I leads through parallel margins of the eye field to the antinomy between sternum narrowed anteriorly (like in Marpissa) and sternum not narrowed. As it is not narrowed the only choice is the group Gophoeae - and this is a nonsense.

In the Petrunkevitch's key similar steps leads to the antinomy in point 18: sternum broadly truncated anteriorly - sternum considerably narrowed (narrower than the base of labium). In fact the truncature of sternum is equal to the base of labium. Even if one will take second choice the next character leads nowhere. To reach subfamily Dendryphantinae to which Pseudicius belongs eyes II should be closer to eyes I and in fact they are not, at least not distinctly.

Kulczyński's key to the genera of Salticidae in "Araneae Hungariae" (1891) can not help in this problem because of its geographical limitation and it only remains to hope that Kulczyński was right. This example demonstrate gross inadequacy of existing keys to subfamilies and genera of Salticidae.

## Description of male

Cephalothorax brown with scarce remnants of white setae. Length of cephalothorax (first figure - Attus vulpes Grube, 1861 - holotype, second figure - syntype of Pseudicius orientalis Kulczyńskr, 1895) 1.93-2.01, length of eye field $0.78-0.84$, width of eye field I 1.06-1.12, width of eye field III 1.12--1.12. Ratios; a 0.41-0.42, b $0.95-1.00$, c $0.74-0.75$.

Abdomen contracted now and entirely changed, length of abdomen (KuLCZYŃSKI's specimen only) 2.29 .

Sternum and coxae pale greyish-brown, anterior coxae darker. Maxillae and labium brown, white tipped. Pedipalps brownish-yellow, femur brown. The shape of copulatory organ, tibial apophysis and pedipalpal femur is given on figs. 30-33. Legs pale greyish-brown, anterior leg fawnish-brown


Figs. 30-34. Pseudicius vulpes (Grube, 1861). Holotype. 30-32 - male copulatory organ, ventral, lateral and dorsal view of the tibia, 33 - entire pedipalp, 34 - cheliceral dentition.
with femur brown. Length of segments of legs: I $0.50-0.53+0.70-0.81+$ $+0.98-1.03+0.78-0.78+1.15-1.26$, II $0.42-0.39+0.53-0.56+0.61-0.70+0.53-$ $-0.56+0.89-0.92$, III $0.28-0.47+0.78-0.64+0.56-0.59+0.47-0.50+0.89-0.92$, IV $0.42-?+0.78-0.78+0.78-0.78+0.56-0.50+1.15-1.15$. Ratio $d 1.35-1.29$.

Description of female
Cephalothorax brown with remnants of white setae. Length of cephalothorax 2.01 , length of eye field 0.78 , width of eye field I 1.12 , width of eye field III 1.17. Ratios: $a 0.39, b 0.95$, c 0.70 .


Figs. 35-36. Pseudicius vulpes (Grube, 1861). Female copulatory organ (Kulczý́ski's specimen) before and after maceration.

Soft tissues of the abdomen are partly macerated, present colouration is greyish-brown.

Epigynum with two oval grooves (fig. 35), spermathecae in a form of a pair of simple elongated vesicles with distinct accessory glands (fig. 36).

Sternum pale brown. Coxae pale fawn with anterior one darker. Maxillary plates and labium fawn, white tipped. Chelicerae fawn with a strong tooth on their inner posterior margin.

Legs uniformly fawnish. Length of segments of legs: I tarsus-patella lacking +0.98 , II tarsus-metatarsus lacking $+0.53+0.53+0.84$, III $0.47+$ $+0.64+0.56+0.33+0.92$, IV tarsus-patella lacking +1.15 .
XII. Sitticus lineolatus (Grube, 1861), comb. n.

Synonyms: Attus lineolatus Grube, 1861 et auctores,
Sittacus ranieri Peckham, 1909 et auctores, syn. n.,
Attus ranieri: Banks, 1910,
Sitticus ranieri: Petrunkevitch, 1911,
Sitticus ranierinus: Bonnet, 1958,
Sitticus haydeni Levi et Levi, 1951, syn. n.
Material: 1 of "Evophrys lineolatus Gr[ube] ot. [leg.] Masck, Wilui [Vilyuy River, East Siberia]" - holotype. Coll. Grube, Zool. Mus. Wroclaw.

Remark. Comprehensive description of both sexes given in a separate paper (PrósZYŃSKI, in print). I limit myself here to description of the holotype in its present condition.

## Description of male

Cephalothorax brown, eye field dark brown with a copper gleam. Length of cephalothorax 2.24 , length of eye field 0.84 , width of eye field I 1.42 , width of eye field III 1.42, Ratios: a $0.37, b 1.00, c 0.59$.

Abdomen dark brown with remnants of brownish and whitish setae, no traces of any distinct colour pattern. Length of abdomen 2.10.

Chelicerae with a typical for a Sitticus dentition.
Copulatory organ quite robust with long stylus and long and strong tibial apophysis (figs. 37-39). Legs dark brown with tarsus and metatarsus slightly paler. Length of segments of legs: I $0.56+0.64+0.67+0.56+1.06$, II $0.50+0.61+0.70+0.50+0.98$, III $0.50+0.56+0.42+0.87$, IV $0.59+0.84+$ $+0.84+0.61+1.42$. Ratio $d 1.50$.

## XIII. Telamonia castriesiana (Grube, 1861)

Synonyms: Attus castriesianus Grube, 1861 et auctores, Maevia castriesiana: Kulczyński, 1895, Telamonia castriesiana: Simon, 1901 et auctores.
Material: "Attus [unpublished Latin name] Gr[Ube] [leg.] Schrenck, Bai de Castries" - presumably holotype of this species. Coll. Grube, Zool. Mus. Wroclaw.


Figs. 37-39. Sitticus lineolatus (Grube, 1861). Male copulatory organ of the holotype. 37 ventral view, 38-39 - lateral and dorsal view of the tibia.

Remark. There is only separated cephalothorax left in the tube, without any legs or pedipalps, so there is no possibility to redescribe the presumed holotype. Fortunately $T e$ lamonia castriesiana (Grube, 1861) is a well known species and there is on danger of confusing it with other species.

## XIV. Other Salticidae species

Apart from the above mentioned species there are 6 tubes with other species in the East Siberian Grube's collection. They contain following species:

1. 2 와 Carrhotus bicolor (Walckenaer, 1802) [?], one collected by MaAck in the Amur River basin and the second by Schrenck in "Chungar" (Chungare near Otu on Amur between Sungari and Ussuri).
2. 1 \& Heliophanus dubius C. L. Koch, 1835 from Stanovoi Mounts.
3. 1 \& Sitticus finschi (L. Koch, 1879) from Stanovoi Mounts.
4. 1 \& Dendryphantes sp. from the Amur River basin, leg. Schrenck.
5. $1 \delta^{t}$ of an ant-like Salticid from Nikolayevsk-na-Amure leg. Schrenck.

I hope to be able to discuss some of these specimens, especially those provisionally identified, in the future.

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## STRESZCZENIE

[Tytuł: Redeskrypcje wschodniosyberyjskich gatunków Salticidae (Aranei) z kolekcji Muzeum Zoologicznego we Wrocławiu opisanych przez A. E. Grubego]

W roku 1861 A. E. Grube oznaczył i opisał zbiory pająków z Syberii Wschodniej. Ze względu na lakoniczność oryginalnych opisów, większości tych gatunków nie można bylo zidentyfikować i powstalo zamieszanie w systematyce pająków wschodniopalearktycznych. Dzięki odnalezieniu kolekeji Grubego w zbiorach Muzeum Zoologicznego Uniwersytetu Wrocławskiego, możliwe stało się wyjasnienie nieporozumień. Niniejsza praca podaje analizę gatunków Salticidae
w zbiorach Grubego. Dwa gatunki uznane zostaly za nie nadające się do zidentyfikowania, 10 gatunków zrewidowano, jeden nie wymagal wyjaśnień. Ponadto zidentyfikowano częsciowo lub całkowicie 5 dalszych gatunków.

## РЕЗЮME

[Заглавие: Редескрипции восточно-сибирских видов Salticidae (Aranei) из коллекции Зоологического музея во Вроцлаве описанных А. Э. Грубе].

В 1861 г. А. Э. Грубе описал определенную им коллекцию пауков из Восточной Сибири. Короткие оригинальные описания были недостаточны для идентификации большинства видов, что внесло беспорядок в систематике восточно-палеарктических пауков. Материалы А. Э. Грубе найдены в коллекции Зоологического Музея во Вроцлаве, что позволило выяснить недоразумение. В статье приводится анализ видов семейства Salticidae из коллекции А. Э. Грубе. Два вида оказались невозможными для идентификации, проведена ревизия 10 -ти видов, один не требовал объяснений. Кроме того обработано полностью или частично 5 следующих видов.

Pelakiel Abademit Neolk BBLOOTEKA


[^0]:    ${ }^{1}$ I do not quote unpublished names to avoid creation of new nomina nuda.

[^1]:    ${ }^{1}$ There is a marked similarity between characters pictured by Saito, 1960: fig. 217b and c and the Grube's specimen, there are also certain resemblances between colour pattern described by Grube and Saito's fig. 217a. It is on the basis of these resemblances that I consider Saito's described species conspecific with "Attus" arenicolor Grube, 1861. This assumption must, however, be checked on Japanese specimens, which I am lacking.
    ${ }^{2}$ Explanation of measurements and ratios was given in Prószý́ski, 1968. To remind some points here legs segments lengths are given in the following order: Ta.+Meta. + Tib. + +Pat.+Fem. Ratios: $a$ - length of eye field to length of cephalothorax, $b$ - width of eye field I to width of eye field III (measured on the level of the respective eye rows), $c$ length of eye field to width of eye field I, $d$ - length of tibia IV to length of tibia III.

[^2]:    ${ }^{1}$ There are clear resemblances in shape of tibial apophysis between Phlegra pichoni Schenkel, 1963: 439, fig. 251 and Aelurillus festivus (C. L. Koch, 1834) but there are also certain differences in the shape of the sclerotized ventral branch of the apophysis. Whether that is a real difference or a drawing error may be ascertain after examination of the Schen kel specimen only. By the way, my recent research indicates that generic differences between Phlegra Simon, 1876 and Aelurillus Simon, 1884 are doubtful. I shall try to clarify that in the near future.

[^3]:    ${ }^{1}$ The collecting place in the original description is given as "East Siberia". In the introduction, however, Grube writes "... the specimens sent to me from East Siberia, especially from Stanovoi Mts. ...". It is clear that Grube uses name "East Siberia" as a more general instead of more particular names like "Stanovoi Mts." and there is no contradiction between geographic name written on the label and in the original description.

[^4]:    ${ }^{1}$ It is worth of underlining that the length order of legs differ in male (I, III, IV, II) and female (III, IV, I, II) of this species. I have found numerous examples of that sexual difference in my biometric studies on various Salticidae subfamilies and genera. Length order of legs has been used by Simon (1901) as one of most important taxonomic characters for separation of subfamilies and genera and now, after discovery that it is a sexual difference in, at least, many Salticidae, I am inclined to discard it entirely. Unfortunately I do not know with which character can it be replaced.

