

**BERYTIDAE (HETEROPTERA) OF CONGO (LÉOPOLDVILLE),
RWANDA AND BURUNDI**

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Introduction

There is little known of African Berytidae and especially those of the Congo, Rwanda and Burundi. Schouteden (1912) in his study of Heteroptera material from the named region deals also with three species of Berytidae, namely *Capyella malacaipus* (Stål) [= *Gombora alberti* Schout.], *Capyella iturica* (Schout.) [= *Gombora iturica* Schout.] and *Capyella etiennei* Schout. Only later *Metacanthus tenerrimus* (Bergroth) (described from Madagascar) was ascertained by Schouteden (1957) in the material from Basilewsky's expedition to Rwanda-Burundi. Thus, in the past, four species of Berytidae have been reported from the territory studied.

The present paper is based on a large collection of Berytidae from the Musée Royal de l'Afrique Centrale, Tervuren, Belgique (formerly: Musée Royal du Congo belge). Unless otherwise mentioned all the material is from this museum.

Fourteen species of six genera (of which four genera and ten species are described as new) were found among the 166 specimens of Berytidae. Some specimens of the genus *Metacanthus* Costa are not yet positively identified; it will be therefore necessary to examine their systematic position by studying more extensive material. In future further new species will be probably found among them.

The author expresses his sincere thanks to Ing. P. Basilewsky, chief of the Entomological Department of the Musée Royal de l'Afrique centrale, Tervuren (Belg.) who was kind enough to lend him the material of Berytidae for examination, and for the loan of Schouteden's holotypes of *Gombora alberti* Schout., *Gombora iturica* Schout. and *Capyella etiennei* Schout. Thanks are also due to Dr. E. Kjellander, chief assistant of the Entomological Department of the "Naturhistoriska Riksmuseum, Stockholm," for the loan of Stål's holotype and allotype of *Capys malacaipus* Stål. The author also thanks Dr. Á. Sóos of the "Magyar nemzeti muzeum, Budapest" for the loan of types of *Yemma exilis* Horv., *Triconulus aegypticus* Horv., *Metacanthus pusillus* Horv., *Pneustocerus brevispina* Horv. and specimens of *Pneustocerus nigricornis* Horv. and *Parajalysus andinus* Horv.

Dimorphoberytus, n. gen.

Derivatio nominis: This new genus is named *Dimorphoberytus* in allusion to its sexual dimorphism which is very strikingly developed.

Type locality: Congo, Mayumbe.

Type-species: *Dimorphoberytus variabilis*, sp. n. by monotypy.

Diagnosis: Ocelli very near to the lateral margins of the head, antennae much longer than the body. Humeral angles of the pronotum produced into high spiniform processes. Mesothorax very large and wide. Ostiolar processes long. Hemelytra smooth, unpunctured. Dimorphic, legs in males armed with spines.

Description: Head relatively small, short, the frontal portion of the head is strongly pressed from the sides so that a high carina-shaped comb not being of process-shaped character arises approximately between the bases of the antennae (Figs. 2, 3, 5).

Ocelli are situated very near to the lateral margins of the head and relatively near the eyes. Distance between the ocelli is very long. Antennae very long and very thin, much longer than the body. The first antennal joint is longer than half the body. The fourth antennal joint is of cylindrical shape. The apex of the first antennal joint and apices of femora are club-shaped enlarged. Pronotum, lateral portions of the meso- and metathorax coarsely dotted. Humeral angles of the pronotum are elevated into high robust processes which are pointed at their apices and directed upwards. Mesothorax is very developed; it is the widest part of the body and almost of spherical shape. The ventral side of mesothorax, metathorax and of the first abdominal segment with median sulcus. Apex of the scutellum is armed with a little tubercle. The ostiolar processes long, roundly dilated and hemmed (bordered) at their apices. Hemelytra unpunctured, smooth, with very typical venation as in fig. 4. Tibiae longer than femora. Sexually dimorphic, the mesothorax is larger in male than in female. The legs of males armed with large cogs.

Discussion: This new genus very differs from all the genera of hitherto known Berytidae. This is the only one genus of Berytidae in which a strong sexual dimorphism occurs. The mesothorax is very large and wide, the legs of males armed with cogs, etc.

Dimorphoberytus variabilis, sp. n.

(Fig. 1)

Derivation of name: This curious species is named *D. variabilis* as some of its structures, especially in males (e. g. the cogs on the legs, the length of humeral spines etc.) are strongly variable.

Type locality: Congo, Mayumbe, Luvu.

Holotype (♂) and allotype (♀) in collections of the Musée Royal de l'Afrique centrale, Tervuren (Belg.).

Description: Strongly sexually dimorphic species.

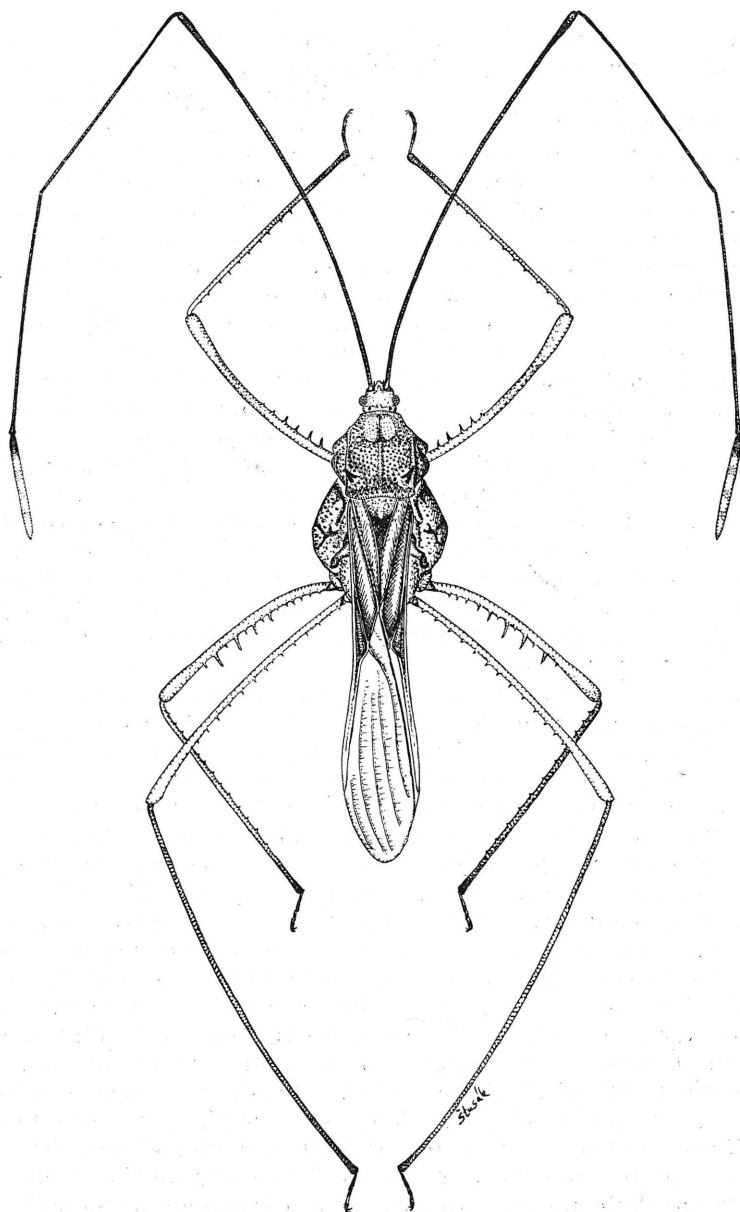


Fig. 1. *Dimorphoberytus variabilis*, sp. n., male.

Male: General predominant colour ochreous-yellow. Head approximately as long as wide (or very slightly wider). The median frontal high carina-shaped comb extends from the level of the middle of the eyes to the level of antenniferous tubercles (fig. 2, 5). Antenniferous tubercles

obtuse. Bucculae very prominent forwardly exceeding the level of anteclypeus. Eyes brown-black. The anteocellary sulcus deep. Ocelli reddish coloured and situated very near to the lateral margins of the head. The distance between them is much longer than the distance between the ocellus and the posterior margin of the eye. At the level of the ocelli the lateral margins of the head are moderately enlarged sideways into little tubercles. On these tubercles as well as on the anteclypeus, the apex of the frontal comb and on the dorsal sides of the antenniferous tubercles there are tiny tubercles with strong, short and light coloured hairs. Antennae are much more longer than the body (approximately twice as long) and very thin. The first antennal joint is a little shorter than the body and moderately club-shaped at its apex; the second joint is thinner and approximately half as long as the first; its apex is not enlarged. The third antennal joint is longer than the second; its apex is slightly enlarged. The first, second and third joints are black-brown coloured. The fourth antennal joint is half as long as the second one, wider than the first and covered with fine and dense hairs. Its basal portion (about the basal one fifth) is black, the other part is whitish with light fuscous irregular spots. Rostrum surpassing the middle of mesosternum, but it does not nearly reach the middle coxae. The first rostral joint is the widest one, yellowish coloured and approximately as long as the ventral side of the head. Remaining portion of the rostrum is black-brown. Relation of rostral joints: I: II: III: IV = 21:17:16:25.

Thorax — compared with the other species of the family Berytidae — is very developed. Prothorax is about 1.2 to 1.4-times as long as wide. The lateral portions of the thorax are light ochreous and punctured like the pronotum. Sternum unpunctured, pro- and mesosternum with brown coloured coxae, metasternum and posterior coxae black-brown. The width of the prothorax is very variable. Pronotum is very strikingly dotted, the anterior pronotal margin almost straight (or moderately convex) and posterior margin of the pronotum concavely excised. The anterior portion of the pronotum (somewhat less than one half) is elevated and strongly vaulted in comparison with the other portions of the pronotal disc (character of the male) (fig. 2), on it are situated large calosities without structure. The posterior portion of the pronotum (behind the calosities) is only moderately vaulted. Behind the calosities, i. e. approximately in the middle of the pronotum, begins the median carina which extends from the calosities to the level of the humeral elevations. On each of the lateral margins of the pronotal disc there is a striking longitudinal carina. Humeral angles of the pronotum with high elevations which are produced into high, straight, spiniform processes directed upwards. These processes are pointed at their apices, they are smooth (without structure) and black so that they contrast strikingly with the light yellow-ochreous colour of the pronotum. These spines vary somewhat in length. The largest of the thoracic segments is the mesothorax which is almost sphere-shaped enlarged, so that it is the widest part of the body. Its yellowish ochreous colouring is marked with irregular black-brown sinuous lines (fig. 2, 3).

The sternal portion of metathorax is unstructured, smooth, except

for numerous tiny cog-shaped tubercles. In the median line of the mesosternum there is a concave deep furrow which is not, however, bordered at its lateral sides. Near the anterior margin of the mesosternum, on each side of the median furrow, there is situated one larger blackbrown tuber-

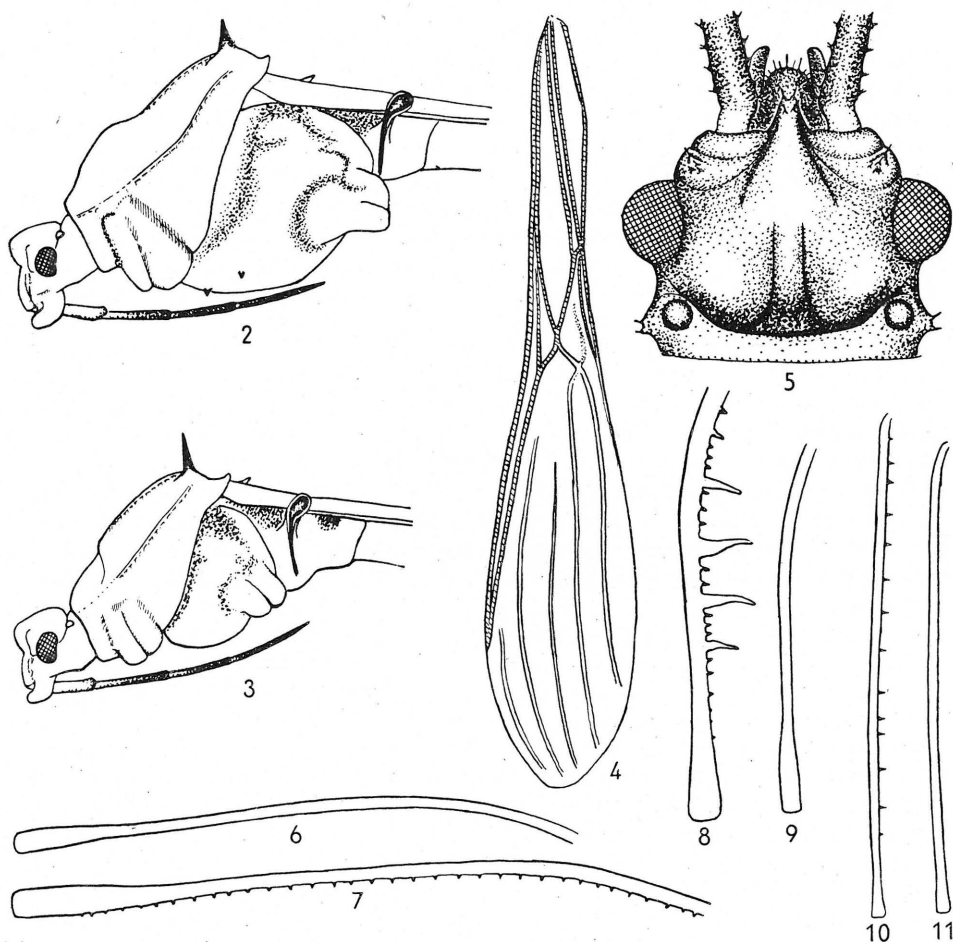


Fig. 2—11. *Dimorphoberytus variabilis*, sp. n.

Fig. 2. Male, lateral view. Fig. 3. Female, lateral view. Fig. 4. Hemielytra. Fig. 5. Head. Fig. 6. Posterior femur of female Fig. 7. Posterior femur of male. Fig. 8. Middle femur of male. Fig. 9. Middle femur of female. Fig. 10. Anterior tibia of male. Fig. 11. Anterior tibia of female.

cle. In the laterocaudal direction from these tubercles there is also a couple of similar tubercles.

Scutellum light, relatively large, coarsely dotted, armed with a little tubercle in the middle of its posterior margin. The ostiolar processes projecting far beyond the level of the hemielytra, yellow, roundly enlarged

and bordered. They are moderately curved backwards at their apices. Their inner side is black-brown. Metathorax small, yellowish, its sternal portion concave medially. The furrow extends also on to the first abdominal sternite.

Legs darker fuscous, the coxae very large and as well as the trochanteres armed with numerous little cog-shaped tubercles on the lower side. Femora clubbed at their apices and curved especially in the basal portions. Femora of the middle legs are the widest ones, posterior femora strikingly thin. The inner sides of the femora armed with conspicuous cogs. Basal portions of the anterior femora armed with large cogs which are only moderately shorter than the width of the femur. Middle femora armed with irregular small cogs and there are, as a rule, three to five large cogs, which are very wide and much longer than the width of the femur (fig. 8). Posterior femora with very small cogs (fig. 7). The cogs of the femora are darker in colour (to brown-black) than the femur, and their number, size etc. vary strongly. Apex of the posterior femur projecting a little beyond the abdomen. Tibiae black-brown with moderately enlarged apices. The anterior and middle tibiae armed with tiny cogs on their inner sides (fig. 10). Posterior tibiae unarmed. Tarsi dark brown with blackish apices. The first tarsal joint is as long as the second and third together, the second joint is shorter than the third.

Hemelytra reaching the end of the abdomen. Corium and clavus unpunctured, smooth, dark brown with light yellow-ochreous veins. Membrane very transparent. Venation of the hemelytra as in fig. 4. Abdomen slender, ochreous-brown, almost smooth, ventral side densely covered with fine hairs.

Female (fig. 3): In size and colour as the male. It differs especially in following characters: The calosities of the pronotum are smaller and the anterior portion of the pronotum (in the region of the calosities) is not conspicuously elevated and vaulted as in the male, but it is at the same level as the other portions of the pronotal disc, or often moderately concave, so that a transverse culcus dividing the pronotum into an anterior and a posterior lobe is situated behind the calosities (fig. 3). Mesothorax is much more smaller than in male, so that the relations of the thoratic segments are different. The rostrum extends considerably beyond the middle coxae and reaches almost to the posterior ones. The maximal width of the body is much more smaller than in the male, but, nevertheless, the mesothorax is the widest portion of the body. The ventral side of mesothorax without any cog-shaped tubercles.

The posterior femora are not conspicuously thinner than the anterior and middle ones, but their width is the same as in the other legs. Coxae, trochanteres, femora and tibiae of all pairs of legs are unarmed, i.e. without any cogs or tubercles (fig. 6, 9, 11). Hemelytra moderately shorter than the abdomen.

Measurements: holotype (♂). Length of body 11.26 mm., maximal width (mesothorax) 2.98 mm., length of pronotum 2.89 mm., width of pronotum 2.17 mm., width of pronotal disc between the lateral carinae 1.62 mm., width of head 0.89 mm., length of head 0.81 mm., length of

antenna 23.29 mm. (I: II: III: IV = 10.20 mm.: 4.97 mm.: 5.57 mm.: 2.55 mm.).

leg	femur	tibia	tarsus
anterior	5.10 mm.	5.19 mm.	1.02 mm.
middle	5.23 mm.	5.57 mm.	1.06 mm.
posterior	7.48 mm.	9.35 mm.	0.98 mm.

Allotype (♀): length of body 9.95 mm., maximal width of body (mesothorax) 1.83 mm., length of pronotum 2.21 mm., width of pronotum 1.57 mm., width of pronotal disc between the lateral carinae 1.32 mm., length of head 0.68 mm., width of head 0.85 mm., length of antenna 17.99 mm. (I: II: III: IV = 7.74 mm.: 3.53 mm.; 4.17 mm.: 2.55 mm.).

leg	femur	tibia	tarsus
anterior	4.21 mm.	4.89 mm.	0.89 mm.
middle	4.25 mm.	5.02 mm.	0.93 mm.
posterior	6.50 mm.	9.05 mm.	0.93 mm.

Measurements and also proportions of some body portions are considerably variable. These are therefore the most important ones: (male) length of body 10.83 mm. to 12.00 mm., maximal width of body (mesothorax) 2.30 mm. to 3.15 mm., length of pronotum 2.72 mm. to 3.15 mm., width of pronotum 1.87 mm. to 2.25 mm., width of pronotal disc between the lateral carinae 1.53 mm. to 1.79 mm.

Material examined: Congo: Mayumbe, Luvu, 22. 6. 1924, leg. A. Collart (holotype ♂); Lulua, Kapanga, 12. 1932, leg. F. G. Overlaet (1 ♂, 1 ♀); Tshuapa, Bokuma, 1953, leg. R. P. Lootens (1 ♂); Kikwit, 11. 1920, leg. P. Vanderijst (2 ♂♂); Kasai, Ipamu, 1922, leg. P. Vanderijst (8 ♂♂, 8 ♀♀); Kamaiembi, Luebo, 18. 9. 1921, leg. H. Schouteden (1 ♀); Kasai, Kondué, leg. E. Luja (2 ♂♂); Kasai, Kondué, leg. Leohard (1 ♀); Malela, 3. 1. 1921, leg. L. Ghesquière (1 ♂); Malea, 12. 1913, leg. L. Burgeon (1 ♂); Kisala, 21. 10. 1920, leg. H. Schouteden (1 ♂); Cameroons, coll. Schouteden (1 ♂).

Paraberytus, n. gen.

Derivation of name: The name of the new genus was formed by the Greek prefix.

Type locality: Congo.

Type-species: *Paraberytus mirabilis*, sp. n.

Extent of genus: Two species known.

Diagnosis: Pronotum without any processes, humeral angles of the pronotum slightly elevated. Head armed with a strong robust process (which is not spine-like) directed forward. Anterior margin of the pronotum not convex. Antennae very long. Scutellum armed with a spine. Ostiolar processes relatively short.

Description: Body very long and narrow. Head longer than wide, armed with a strong robust frontal process directed forward; the process is not of a spine-shaped character. Head divided dorsally into anterior

and posterior portion by deep transverse right and left anteocellary sulci. Rostrum reaching to the anterior margin of the posterior coxae. Antennae longer than the body. The first antennal joint is distinctly longer than half the body, the second joint is considerably shorter than the third, but longer than the fourth. The fourth antennal joint is the shortest but widest one. Pronotum approximately 1.5 times as long as wide, with the anterior margin moderately concave, or almost straight, but not convex. The posterior two thirds of the pronotum moderately vaulted. Pronotum with three longitudinal narrow and low, but very distinct carinae. Two of them (the lateral ones) running close to the lateral margins of the pronotum; they are very distinct also in dorsal view. The third carina runs medially. Humeral angles of the pronotum with low elevations, the similar third elevation is situated between the humeral ones medially. Into this elevation runs the median longitudinal carina. The posterior pronotal margin considerably concave. Scutellum armed with a slender short erect spine. Ostiolar processes well developed with sulci; they do not reach, however, the level of hemielytra — they are relatively short. Hemielytra projecting beyond the abdomen, venation is very different from the related genera (fig. 15). Membrane with five striking longitudinal veins, from which the first inner vein is only very moderately bent (almost straight). Distal ends of the other four veins are arch-like curved to the inner margin of the membrane at their apices. Legs very long and slender. Apices of femora and the first antennal joints strikingly clavate. Posterior femora projecting beyond the apex of abdomen. Tibiae longer than femora.

Discussion: This new genus differs considerably from the other genera especially in its hemielytral venation and in the other characters mentioned above.

***Paraberytus mirabilis*, sp. n.**

(fig. 12, 13)

Derivation of name: *mirabilis* = wonderful.

Type locality: Congo, Haut-Uele, Moto.

Holotype (♂) in collections of the Musée Royal de l'Afrique centrale, Tervuren (Belg.).

Description: General colour light ochreous-brown (holotype) to dark brown-black (paratype). Head approximately 1.4 times as long as wide (measured over the eyes), between the antennae armed with a strong and robust process which is almost straight and directed forward (fig. 13). The process is downy and this downy structure runs partly into a narrow median stripe reaching the transverse anteocellary sulcus, partly into two lateral narrow stripes running to the anteocellary sulcus also. The portions of the head between the median and lateral stripes are not downy, but smooth and they are of triangular shape. Ocelli red coloured, the distance between them is somewhat shorter than the distance between the posterior margin of the eye and the ocellus. A similar downy stripe is also on the lateral sides of the head and it runs from the anterior margin of the eye closely under the eye in the caudal direction. Behind

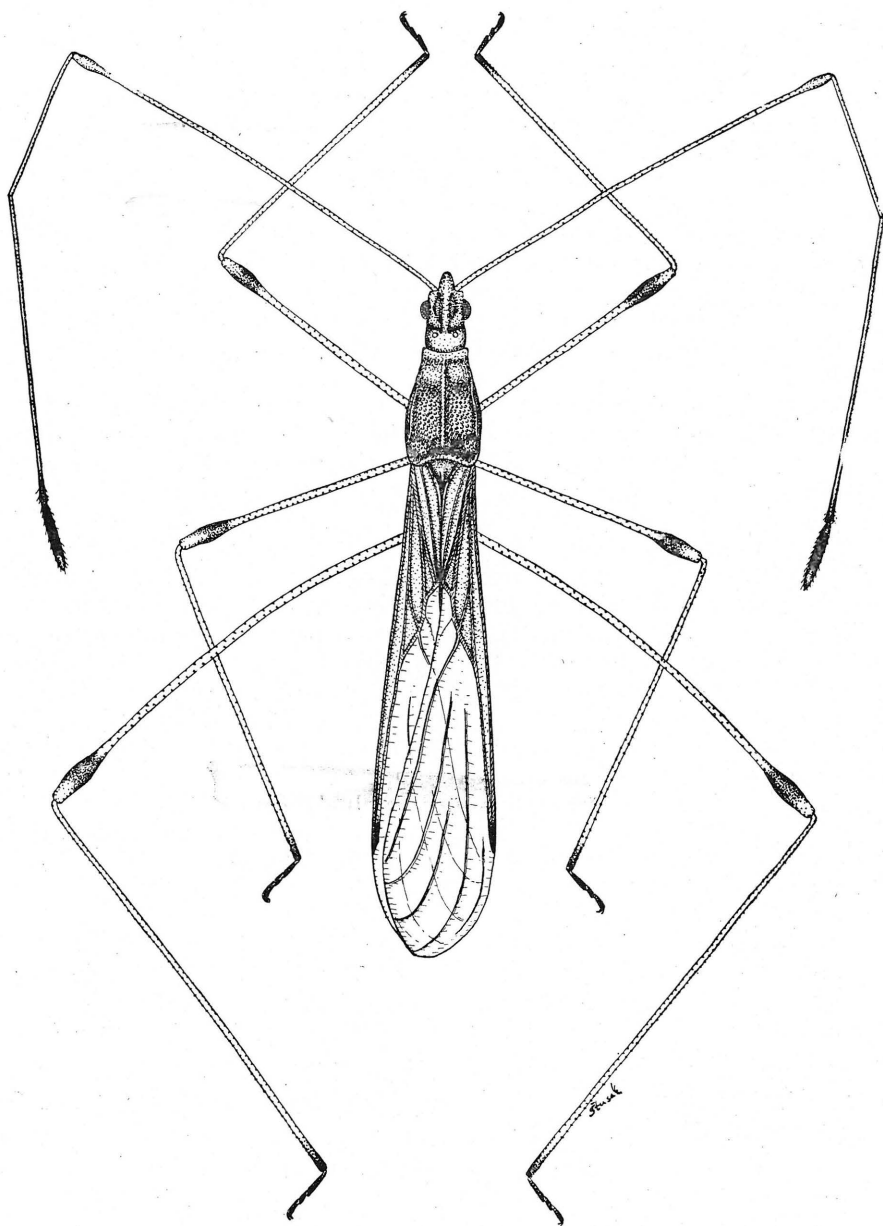


Fig. 12. *Paraberytus mirabilis*, sp n., male.

the eye it is forkedly ramified. Eyes red-brown. Antennae yellow-ochreous, covered with tiny brown-black elevated punctures. The apical part of the first antennal joint is clavate, the clava is dark brown with the tip light ochreous-brown. The apex of the third antennal joint is moderately enlarged and darkened. The fourth joint is the widest one (approximately as wide as the clava of the first antennal joint), black except for its distal fourth which is rusty brown. Antennae covered with very fine short hairs; only the fourth segment is densely covered with longer yellowish hairs. Rostrum reaching to the anterior margin of the hind coxae. The first rostral joint as long as the fourth and equal in length to the ventral side of the head, i. e. it reaches to the anterior margin of the prothorax. The second joint a little shorter than the first, the third rostral joint approximately half the length of the first joint. The fourth joint with blackened tip. Relation of rostral joints: I: II: III: IV = 19: 17: 10: 19.

Pronotum about 1.5 times as long as wide, brown in colour, with three longitudinal carinae which are light. The anterior lobe of the pronotum (anterior $\frac{1}{3}$) is finely punctured, the posterior lobe with coarse punctures. Posterior margin of the pronotum concave. Hemelytra brown, corium very finely punctured; the apical angle of the corium with blackish spot. Membrane with sporadic smoke-coloured spots at its apex (fig. 15). Femora and tibiae ochreous brown with black-brown vaulted punctures, apical clavae of femora dark brown with yellow-ochreous tips. The distal ends of tibiae moderately enlarged and black-brown. Tarsi black-brown. The first tarsal joint as long as the second and third together, the second shorter than the third. Abdomen brown, on the ventral side coarsely punctured. It is very finely punctured dorsally. On the lateral margins of the abdominal segments there are always light yellowish ochreous spots on the connexivum.

Measurements: (holotype) Length of body 8.14 mm., maximal width of body 1.35 mm., width of head 0.64 mm., length of pronotum 1.45 mm., width of pronotum 1.02 mm., length of antenna 12.02 mm. (I: II: III: IV = 5.27 mm.: 1.99 mm.: 3.87 mm.: 0.89 mm.).

leg	femur	tibia	tarsus
anterior	3.40 mm.	3.91 mm.	0.55 mm.
middle	3.49 mm.	4.25 mm.	0.56 mm.
posterior	5.36 mm.	7.20 mm.	0.57 mm.

Material examined: Congo: Haut-Uele, Moto, 4—5. 1923, leg. L. Burgeon (holotype ♂, paratype ♂); Lulua, Kapanga, 8. 1932, leg. F. G. Overlaet (paratype ♂).

***Paraberytus similis*, sp. n.**

(fig. 14)

Derivation of name: This species is named *P. similis* by reason of its similarity to the preceding species.

Type locality: Congo, Lulua, Kapanga.

Holotype (♂) in collections of the Musée Royal de l'Afrique centrale, Tervuren (Belg.).

This species is very similar in size, proportions, structures and colour to the species *Paraberytus mirabilis*, sp. n. Therefore, the differences only will be mentioned.

Description: A strong and robust forward directed process of the head is not straight but obliquely curved downwards at its end. The first

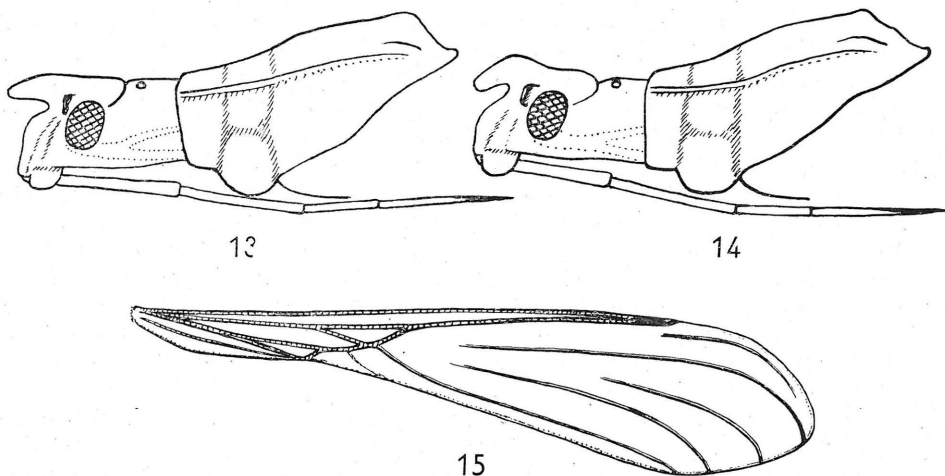


Fig. 13. *Paraberytus mirabilis*, sp. n., lateral view. Fig. 14. *Paraberytus similis*, sp. n., lateral view. Fig. 15. *Paraberytus mirabilis*, sp. n., hemelytra.

rostral joint is shorter than the ventral side of the head, it does not reach to the anterior margin of the prothorax, but to approximately the level of ocelli. It is somewhat shorter than the fourth rostral joint and very moderately shorter than the second joint. Relation of rostral joints: I:II:III:IV = 16:17:10:18. In comparison with *Paraberytus mirabilis*, sp. n., the anterior margin of the pronotum is somewhat less concave, i. e. it is almost straight.

Measurements: (holotype) Length of body 7.74 mm., width of head 0.64 mm., length of pronotum 1.34 mm., width of pronotum 0.94 mm., length of antenna 11.56 mm. (I:II:III:IV = 4.97 mm.:2.00 mm.:3.70 mm.:0.89 mm.).

	leg	femur	tibia	tarsus
	anterior	3.06 mm.	3.61 mm.	0.55 mm.
	middle	3.40 mm.	3.91 mm.	0.57 mm.
	posterior	5.36 mm.	6.80 mm.	0.60 mm.

Material examined: Congo: Lulua, Kapanga, 8. 1932, leg. F. G. Overlaet (holotype ♂).

Neocapyella, n. gen.

Derivation of name: The name of this new genus was formed from the Greek prefix and the name of existing Berytid genus.

Type-locality: Burundi (Urundi).

Type-species: *Neocapyella basilewskyi*, sp. n. by monotypy.

Diagnosis: Pronotum without any spines, humeral angles of the pronotum with high conical tubercle-like elevations; a similar high elevation is situated between the humeral ones medially. Head between the antennae armed with a spiniform process pointed at its apex. Antennae and legs relatively short. Scutellum armed with a spine.

Description: Head armed with a spiniform process which is situated between the antennae and directed forward. Eyes very large. Antennae distinctly shorter than the body, the first antennal joint being much shorter than half the body. It is approximately as long as the second and third joints measured together. The second antennal joint much shorter than the third, and almost as long as the fourth joint. Pronotum coarsely punctured and with anterior margin convex. The posterior lobe of the pronotum very elevated and vaulted, with three very high conical elevations before the posterior pronotal margin (two humeral and one median situated between them). There are three longitudinal carinae on the pronotum (one median, two lateral). Scutellum armed with a long spine directed upwards. The ostiolar processes long, similar in shape to *Capyella*-species. They reach approximately to the level of the hemielytra (seen in lateral view). The legs are in comparison with the species of the genus *Capyella* Breddin relatively short, curved and the posterior femora do not overreach the apex of hemielytra.

Discussion: This new genus is related to the genus *Capyella* Breddin 1907, but it differs especially in the relatively short antennae and legs, the femora of which are slightly curved, etc.

Neocapyella basilewskyi, sp. n.

(fig. 16, 17)

Derivation of name: This species is named to the honour of Ing. P. Basilewsky, chief of the Entomological Department of the Musée Royal de l'Afrique centrale, Tervuren, who collected this new species of the new genus.

Type locality: Burundi, Kitega, 1600—1700 m.

Holotype in collections of the Musée Royal de l'Afrique centrale, Tervuren, Belg.

Description: General colour brown. Head moderately longer than wide, armed with frontal spiniform process directed almost horizontally forward. The spine is somewhat bent. Eyes large, red-brown. Ocelli red, the distance between them is much longer than the distance between the posterior margin of the eye and ocellus. Antecellary sulci well developed. Antennae much shorter than the body. The first antennal joint shorter than half the body, approximately as long as the second and third joints

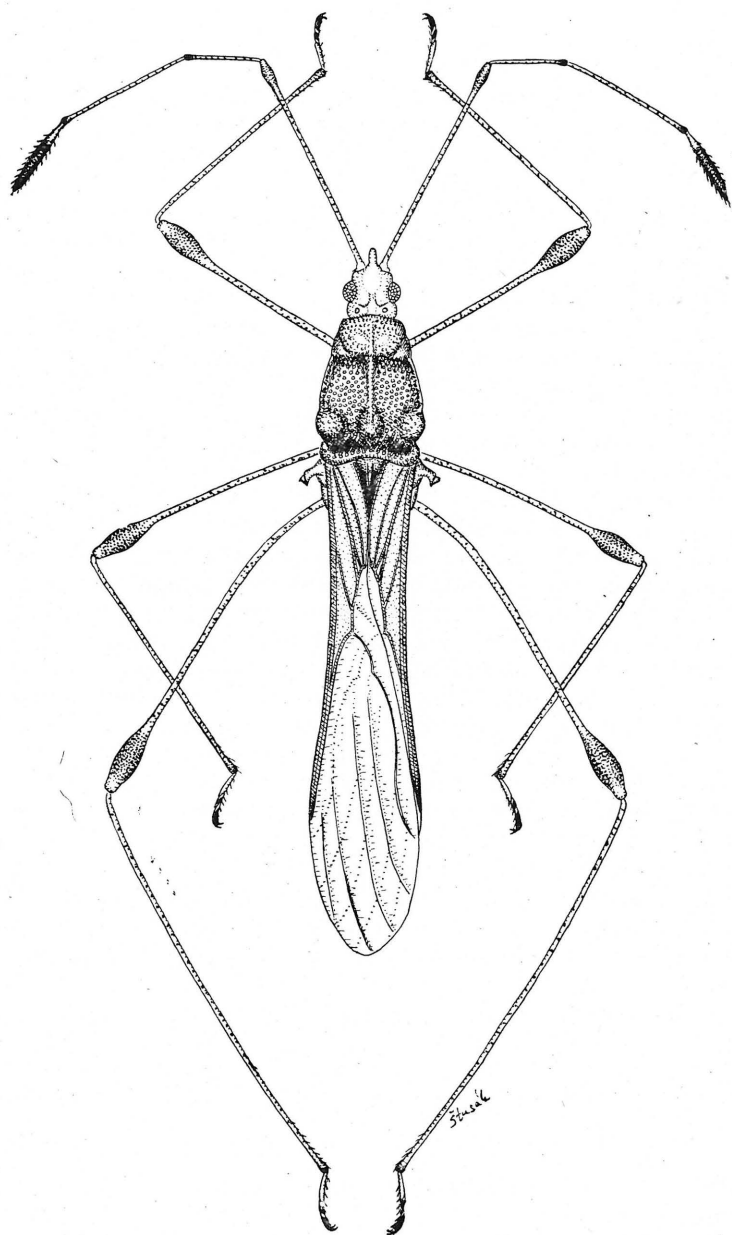


Fig. 16. *Neocapyella basilewskyi*, sp. n.

together. Apex of the first antennal joint clavate and brown in colour. The second antennal joint much shorter than the third and only indistinctly shorter (almost equal in length) than the fourth. The second and third joints moderately enlarged and blackish at their apices. The fourth antennal joint is the widest one, it is approximately as wide as the apical clava of the first joint, black-brown except the base. Joints 1 to 3 ochreous-brown, spotted with black, except apices. Relation of antennal joints: I: II: III: IV = 52:18:32:19. Rostrum does not reach to the posterior coxae. The first rostral joint approximately as long as the ventral portion of the head, reaching to the anterior margin of the prothorax. Relation of rostral joints: I: II: III: IV = 13:9:8:12.5. The greater part of the fourth joint black-brown.

Pronotum approximately 1.4 times as long as wide, coarsely punctured. The posterior lobe of the pronotum (i. e. about posterior two thirds) very vaulted and elevated in relation to the anterior lobe. Humeral angles with high conical elevated tubercles (similar in shape to *Capyella malacaipus* [Stål] [and the third similar elevation of oval shape is situated between them medially (fig. 25)]). Pronotum with three longitudinal carinae: One carina is situated medially and it is especially distinct on the arched portion of the pronotum; it runs into the median cone-shaped elevation. Two lateral carinae very distinct also in dorsal view running on the margins of the pronotal disc. Anterior pronotal margin convex, especially in the middle. Posterior margin of the pronotum is enlarged and concave medially. Scutellum armed with relatively long, bent, obliquely upwards-directed spine. Ostiolar processes long, similar in shape to those of *Capyella* — species. They reach to the level of hemielytra. Hemielytra transparent, unpunctured, with venation similar to *Capyella* Breddin. Portions of several venae blackish. Apical angle of the corium black-brown. Legs relatively short, ochreous-brown, spotted with black. Clavae of femora castaneous brown, only their apices light ochreous. Posterior femora do not extend beyond the distal end of hemielytra, they are slightly curved near their bases. Tibiae longer than femora, with moderately enlarged apices growing dark gradually. The first tarsal joint approximately as long as the second and third together, the second joint shorter than the third. The second and third joints black-brown. Abdomen absent in holotypus.

Measurements: (holotype) Length of body (to the apex of hemielytra) 6.93 mm., length of head 0.64 mm., width of head 0.55 mm., length of pronotum 1.58 mm., width of pronotum 1.11 mm., length of antenna 5.13 mm. (I: II: III: IV = 2.21 mm.: 0.77 mm.: 1.34 mm.: 0.81 mm.).

leg	femur	tibia	tarsus
anterior	2.00 mm.	2.17 mm.	0.64 mm.
middle	2.38 mm.	2.47 mm.	0.64 mm.
posterior	3.66 mm.	4.38 mm.	0.64 mm.

Material examined: Burundi, Kitega, 1600—1700 m., 3.—4. 3. 1953, leg. P. Basilewsky (holotype).

Capyella Breddin, 1907

Capys Stål 1865; Hem. Afr., 2: 119.

Capyella Breddin 1907; Deuts. Ent. Zeit., 1907: 36.

Capytum Strand 1926; Arch. Naturg., 92 (A8): 47.

Gombora Schouteden 1912; Rev. zool. afric., 2: 73. **n. syn.**

By examination of the types (holotype and allotype) of *Capys malacaipus* Stål 1855 which is contemporarily the type of the genus *Capyella* Breddin 1907, and holotype of *Gombora alberti* Schouteden 1912 (type of the genus *Gombora* Schouteden 1912) it was ascertained that both the holotypes are identical. Thus, the previous genus *Gombora* Schouteden 1912 becomes a synonym of the genus *Capyella* Breddin 1907.

Capyella martae, sp. n.

(fig. 30, 27)

Derivation of name: This new species is named in honour of my wife Mrs. Marta Štusáková.

Type locality: Congo (Léopoldville), Kisantu.

Holotype (♂) in collections of the Musée Royal de l'Afrique centrale, Tervuren (Belg.).

Diagnosis: This new species belongs to the group of *Capyella*-species having the humeral angles of the pronotum very elevated into high and large conical tubercles. Pronotum is light straw-yellow, the high humeral elevations pitchy black.

Description: Head light ochreous, approximately as long as wide (measured over the eyes), armed with a slender spiniform frontal process which is moderately curved downwards. Eyes very large, light red in colour. The distance between the ocelli is longer than the distance between the ocellus and the posterior margin of the eye. Antennae very long and slender, about 1.7 times longer than the body. The first antennal joint is longer than half the body and moderately longer than the second and third joints together; its apex with dark brown coloured clava. The second and third antennal joints are moderately enlarged and shaded to dark brown at their apices. The first, second and third joints are light yellowish (except apices) and densely dotted with black. The fourth antennal joint is only a little narrower than the clava of the first joint and densely covered with light hairs. Its basal half is whitish, the distal half is dark brown. Relation of antennal joints: I: II: III: IV = 145: 51: 88: 39. The lateral sides of the head (bucculae also), especially the portions behind the eyes, are coarsely punctured, similar to the pronotum. Rostrum reaching between the posterior coxae. The first rostral joint is longer than the ventral side of the head, it reaches almost to the anterior coxae. The fourth rostral joint with dark brown apex. Relation of rostral joints: I: II: III: IV = 17: 14: 10.5: 17.

Pronotum approximately one third longer than wide (20: 13), very coarsely punctured. The humeral angles of the pronotum very elevated into high conical tubercles. The structure on these tubercles is so coarse that the tiny hexagons (tiny hexagonal cells) are well visible. One dot

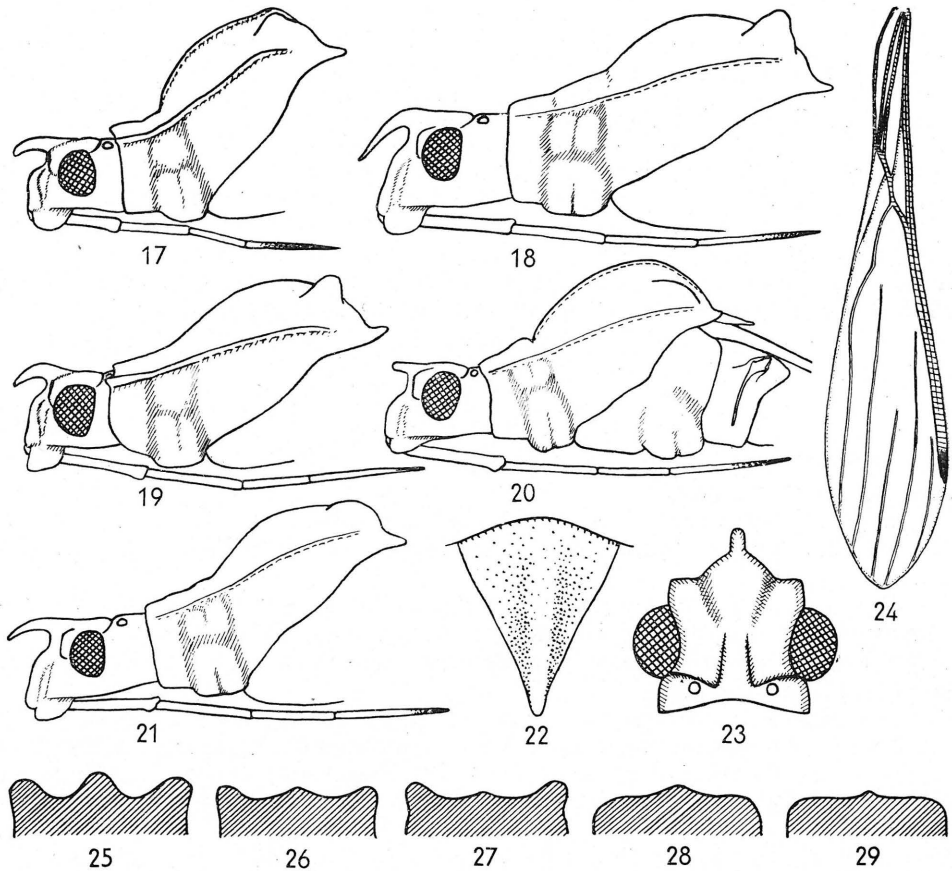


Fig. 17. *Neocapyella basilewskyi*, sp. n., lateral view. Fig. 18. *Capyella malacaiplus* [Stål], lateral view. Fig. 19. *Capyella martae*, sp. n., lateral view. Fig. 20. *Capyella brevispina*, sp. n., lateral view. Fig. 21. *Capyella ambigua*, sp. n., lateral view. Fig. 22. *Capyella brevispina*, sp. n., scutellum. Fig. 23. *Capyella brevispina*, sp. n., head. Fig. 24. *Capyella malacaiplus* (Stål), hemielytra.

Fig. 25—29. Silhouette of the pronotum in view from behind.

Fig. 25. *Neocapyella basilewskyi*, sp. n. Fig. 26. *Capyella malacaiplus* (Stål). Fig. 27. *Capyella martae*, sp. n. Fig. 28. *Capyella brevispina*, sp. n. Fig. 29. *Capyella etiennei* Schout.

(or the tiny hexagon) is about three to four times larger than the dots on the other portions of the pronotum. A low median carina is marked running on the pronotum. Two similar carinae are situated on the lateral margins of the pronotum. Approximately in the first fourth of the pronotum there are two oval, oblique, smooth calosities situated near each other. The anterolateral angles of the pronotum as well as the middle of the anterior pronotal margin are moderately prominent forward, so that the anterior margin of the pronotum has two moderate excisions close to each other. The posterior pronotal margin very concave. Pronotum light

yellowish ochreous, only the humeral cone-shaped elevations are pitchy black. The lateral portions of the thorax light ochreous, punctured as the pronotum. Sternum unpunctured, pro- and mesosternum with brown coxae, metasternum and posterior coxae brown-black. Scutellum very small, armed with short slender spine which is directed almost horizontally.

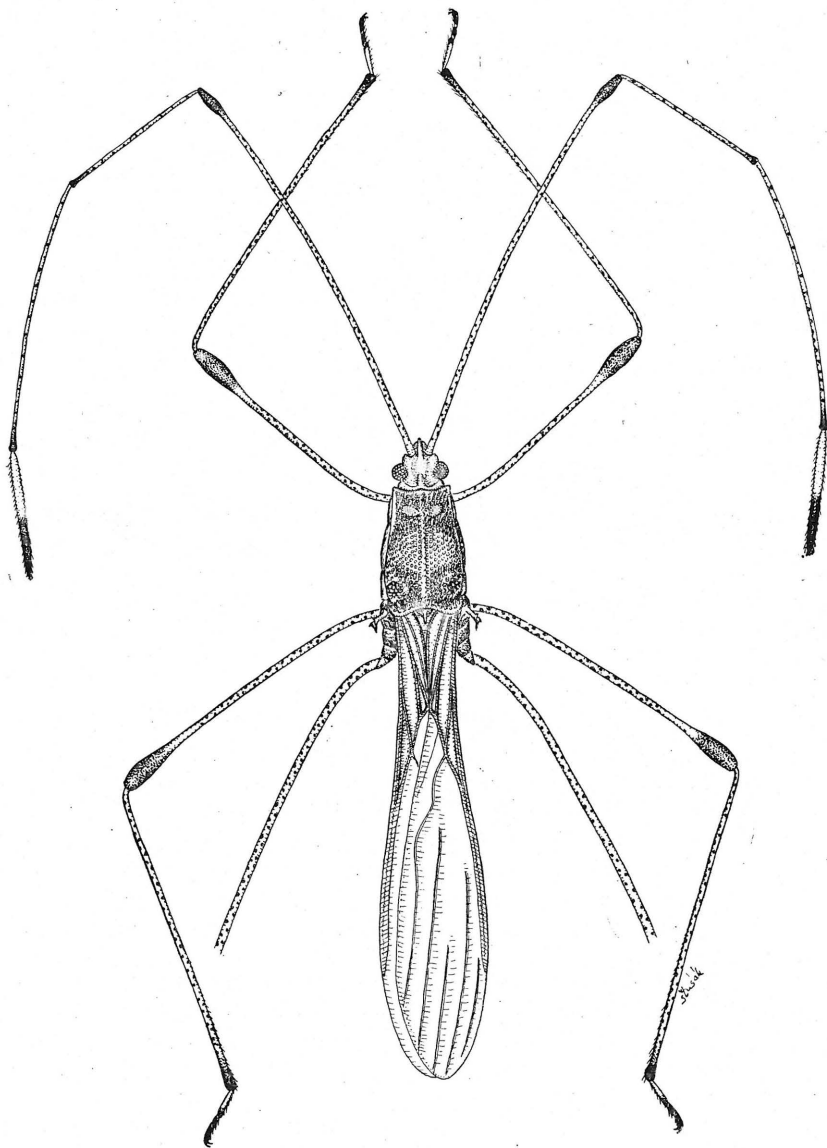


Fig. 30. *Capyella martae*, sp. n.

This spine is approximately as long as the second tarsal joint. Ostiolar processes reaching to the level of hemielytra; they are excised at the apices. Tibiae longer than femora. Femora moderately curved at their bases, light yellowish and covered with pitchy black dots (except the portions close to the apical clavae of femora). The clavae of femora very wide, light brown. Tibiae yellowish, densely pitchy black dotted, with moderately enlarged and blackish apices. The portions of tibiae close to the enlargements are yellowish — without spots. The first tarsal joint moderately longer than the second and third together, yellowish, except its apex. The second joint much shorter than the third; the second and third tarsal joints black-brown. Hemielytra moderately extending beyond the abdomen. Corium and clavus smooth (without punctures), very hyaline, almost as the membrane. Abdomen brown and transversally strigose on the ventral and dorsal sides.

Measurements: (holotype) Length of body 8.08 mm., length of head 0.68 mm., width of head 0.65 mm., length of pronotum 1.68 mm., width of pronotum 1.11 mm., length of antenna 13.73 mm. (I: II: III: IV = 6.16 mm.: 2.17 mm.: 3.74 mm.: 1.66 mm.).

leg	femur	tibia	tarsus
anterior	3.95 mm.	4.46 mm.	0.84 mm.
middle	4.25 mm.	4.55 mm.	0.84 mm.
posterior	absent in holotype		

Material examined: Congo: Kisantu, leg. P. Vanderijst (holotype ♂).

Discussion: This new species is probably related to the species *Capyella malacaipus* (Stål) and *C. iturica* (Schout.). On the other hand it differs in general appearance and in some characters mentioned above. Investigation on a greater material will make clear in future whether or not it belongs to a new genus.

***Capyella malacaipus* (Stål, 1855)**

Neides malacaipus Stål, 1855, *Oefvers. Vet. Ak. Förh.*: 30.

Capys malacaipus Stål, 1865, *Hem. Afr.*, 2: 119.

Gombora alberti Schouteden, 1912, *Rev. zool. afric.*, 2: 74. n. syn.

As mentioned above by examination of the types of *Capys malacaipus* Stål, 1855 and *Gombora alberti* Schouteden, 1912 it was found out that both the holotypes are identical, belonging to the same species: Thus, *Gombora alberti* Schouteden, 1912 is a synonym of the species *Capyella malacaipus* (Stål, 1855).

In the species *Capyella malacaipus* (Stål) the humeral angles of the pronotum are very elevated, in the shape of two high and large conical tubercles, similar to the closely related species *Capyella iturica* (Schouteden, 1912) (fig. 26). The species differ particularly in following characters:

In *C. malacaipus* (Stål) the clavate apical portions of the femora, and especially the clavate apex of the first antennal joint, are rusty brown; femora and tibiae are covered with dark (black-brown) spots

which are less dense and less striking than in the species *C. iturica* (Schout.) (fig. 32). In the species *C. malacaipus* (Stål) the apex of the prolonged portion of the corium is intensely black, which strikingly contrasts with the light ochreous colour of the preceeding portion of the corium. Between the black and light ochreous colours there is no gradation (fig. 38). The conical humeral angles of the pronotum are very slightly less elevated than in the species *C. iturica* (Schout.). In the specimens from the Congo which were examined the eye is somewhat larger than in the species *C. iturica* (Schout.). In the Stål's types, however, from Caffraria (holotype and allotype) the eye is approximately of the same size as in the species *C. iturica* (Schout.). Thus, this character is not of universal use and it will be necessary to investigate it again in more extensive material from other parts of the African continent.

The species *C. malacaipus* (Stål) is so far known from South Africa (from Caffraria described by Stål 1855) and from Congo (as *Gombora alberti* Schouteden 1912).

Material examined: Caffraria, Stål 1855, holotype ♂ and allotype ♀ of *Capys malacaipus* Stål (Naturhistoriska Riksmuseum, Stockholm); Congo, "dans le chemal", 12. 6., Schouteden 1912, holotype ♀ of *Gombora alberti* Schout. (Musée Royal de l'Afrique centrale, Tervuren).

Congo, Banza Manteka, 10.—15. 6. 1912, leg. R. Mayné (7 ♂♂, 11 ♀♀).

***Capyella iturica* (Schouteden, 1912), n. comb.**

Gombora iturica Schouteden, 1912, *Rev. zool. afric.*, 2: 74.

This species is closely related to *Capyella malacaipus* (Stål) being approximately equal in size, shape and proportions of the body parts, in relation of antennal joints etc. It differs, however, from *C. malacaipus* (Stål) in colouring. The apical clavate portions of femora are intense pitchy black (except the extreme apex which is mostly light). Also the apices of the first to third antennal joints are, as a rule, black. Femora and tibiae densely spotted with black, the spots are more dense and more intense than in the species *C. malacaipus* (Stål). A portion just before the black apical clava is often light without spots (but not always) (fig. 31). The apical angle of the prolonged portion of the corium is dark, but less strikingly so than in *C. malacaipus* (Stål). The dark (black-brown) apical colour gradually blends into the light ochreous colour of the preceeding portion of the corium (fig. 37). Humeral angles of the pronotum with high conical tubercles which are somewhat more elevated than in the species *C. malacaipus* (Stål).

Hitherto known from the eastern and north-eastern parts of Congo, Rwanda and Burundi. It is probably a mountain species; with this hypothesis corresponds the stronger and darker pigmentation of the body by comparison with the species *C. malacaipus* (Stål).

The frontal process in the species *C. iturica* (Schout.) and *C. malacaipus* (Stål) is not of systematic value as it varies greatly in size, shape and direction. In both species also the relation of antennal joints, is practically the same. The small differences in relation of the antennal

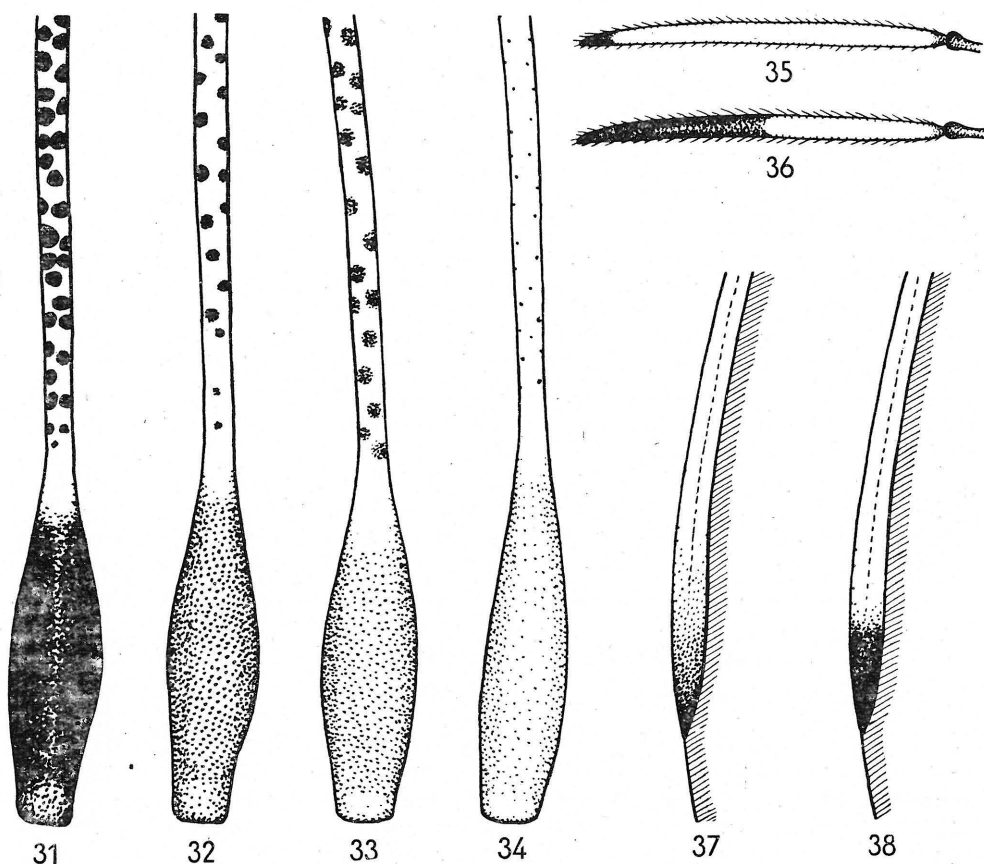


Fig. 31—34. Apical portion of posterior femur.

Fig. 31. *Capyella iturica* (Schout.). Fig. 32. *Capyella malacaius* (Stål). Fig. 33. *Capyella brevispina*, sp. n. Fig. 34. *Capyella vulgaris*, sp. n. Fig. 35. *Capyella vulgaris*, sp. n., fourth antennal joint. Fig. 36. *Capyella ambigua*, sp. n., fourth antennal joint. Fig. 37. *Capyella iturica* (Schout.), apical portion of corium. Fig. 38. *Capyella malacaius* (Stål), apical portion of corium.

joints have a secondary sexual character. In males the fourth antennal joint is usually somewhat longer than in females, which is more evident by comparison between the second and fourth antennal joints (index III: IV). For example, in males of *C. malacaius* $i = 1.22$ to 1.29 , in females $i = 1.34$ to 1.60 . In males of *C. iturica* $i = 1.18$ to 1.40 , in females 1.30 to 1.43 .

Material examined: Congo, between Beni and Lesse, Schouteden 1912, holotype of *Gombora iturica* Schout. (Musée Royal de l'Afrique centrale, Tervuren).

Further material examined: Congo: Abumombazi, 22. 2. 1932, leg. H. J. Brédo (1 ♂); Bas-Uele, Koteli, 1.—21. 1. 1925, leg. H. Schouteden (3 ♂♂, 2 ♀♀); Bambesa, 1. 5. 1938, leg. J. Vrydagh (14 ♂♂, 10 ♀♀, 3 speci-

mens); Uele, Dingila, 1. 8. 1933, leg. H. J. Brédo (1 ♀); Haut-Uele, Moto, 10.—11. 1923, leg. L. Burgeon (2 ♂♂, 2 ♀♀); Mongbwalu (Kilo), 1939, leg. Mme Scheitz (3 ♂♂, 5 ♀♀).

***Capyella brevispina*, sp. n.**

(Fig. 39, 20)

Derivation of name: This new species is named *C. brevispina* by reference to the very short frontal spine, short ostiolar processes and to the absence of the scutellar spine.

Type locality: Congo, Bambesa.

Holotype (♀) in collections of the Musée Royal de l'Afrique centrale, Tervuren.

Diagnosis: This new species belongs to the group of *Capyella*-species which do not have high elevated humeral angles of pronotum, the fourth antennal joint is not enlarged and not black, but it is narrow and bi-coloured. The legs and the first antennal joint of this species are strikingly brown-black spotted. Rostrum reaching between the posterior coxae. This species has the head relatively short and wide, and short pronotum rounded on the lateral sides.

Description: General colour brownish. Head relatively short, wider than long (length with spine : width = 1.20:1.47; length without spine: width = 1.00:1.47), between the bases of the antennae armed with a small, narrow, straight, parallel process (spine) which is directed forward (only moderately upwards) and has a blunt apex (fig. 23). Eyes relatively large. The antecellary sulci well developed. The distance between the posterior margin of the eye and the ocellus is much more shorter than the distance between the ocelli. Bucculae do not extend beyond the anteclypeus. The ventral side of the head blackish. Antennae very thin, approximately 1.45 times longer than the body. The first antennal joint longer than half of the body, dark brown spotted. Its apical clava chestnut brown. It is only moderately longer than the second and third ones together. Apices of the second and third joints moderately enlarged. The second antennal joint brown, darker spotted at its base, growing gradually dark to the apex. The third antennal joint dark black-brown, about one third longer than the second. The fourth joint is about one fourth shorter than the second, approximately as wide as the apical clava of the first antennal joint. It is whitish with a narrow brown ring at the base and with the apical third almost black. Relation of antennal joints: I: II: III: IV = 104: 41: 60: 32. Rostrum reaching between the posterior coxae. It is ochreous brown, only the fourth rostral joint is mainly black-brown. The first rostral joint is longer than the ventral side of the head and it reaches approximately to the half distance, which is between the anterior margin of the pronotum and anterior coxae. Relation of rostral joints: I: II: III: IV = 14: 13: 9: 15.

Pronotum about 1.36 times as long as wide, roughly punctured. Anterior pronotal margin convex, posterior margin arch-shaped concave. Anterior lobe of the pronotum with two calosities situated near each other. The posterior margins of the calosities are deeply indentate, whereby

the anterior lobe is distinctly divided from the posterior lobe. The posterior pronotal lobe is very vaulted, rounded especially on the lateral margins, so that the highest portion of the pronotum is situated in its median line where also runs the longitudinal median carina (fig. 28). On the humeral angles of the pronotum there are very low rounded wide elevations which are, in comparison with the other *Capyella*-species, situated more caudally; they do not reach the level of the highest part of the pronotum. The highest portion of the pronotum is somewhat behind the half part of the posterior pronotal lobe medially. Two lateral carinae are not well visible in dorsal aspect but they are very distinct in the lateral view. They reach to the under margins of the humeral elevations (in lateral view). The ostiolar processes are relatively robust and shorter, not reaching the level of hemielytra. Tibiae longer than femora, the posterior femora very moderately extending beyond the apex of abdomen. Femora and tibiae ochreous coloured and covered with small brown-black spots. The clavate apical portions of femora are chestnut brown, only the apex and portions immediately before the clavae are light ochreous without spots. Apices of tibiae enlarged and black. Tarsi dark brown. Hemielytra similar in shape and venation to related species. Apical angle of the prolonged portion of the corium grades gradually to black-brown. Hemielytra moderately shorter than abdomen. Scutellum longer than wide; without remarkable spine (fig. 22). Abdomen black-brown, only connexivum with wide light yellowish spots in the middle of segments.

Measurements (holotypus): Length of body 6.97 mm., maximal width of body (abdomen) 1.45 mm., width of head 0.62 mm., length of pronotum 1.45 mm., width of pronotum 1.06 mm., length of antenna 10.05 mm. (I: II: III: IV = 4.42 mm.: 1.74 mm.: 2.55 mm.: 1.34 mm.).

leg	femur	tibia	tarsus
anterior	2.59 mm.	3.15 mm.	—
middle	3.10 mm.	3.23 mm.	—
posterior	4.55 mm.	5.78 mm.	0.81 mm.

Material examined: Congo, Bambesa, 3. 1937, leg. J. Vrydagh (holotype ♀).

Discussion: This new species differs from the other *Capyella*-species hitherto known as follows: From *C. malacipus* (Stål), *C. iturica* (Schout.) and *C. martae*, sp. n. in having no high conical elevations on the humeral angles of the pronotum. It differs from *C. gracilis* (Distant 1911) which has the fourth antennal joint black, by the whitish fourth joint with black apex and by the relation of antennal joints. In *C. gracilis* (Dist.) the second joint is only moderately shorter than the third. From *C. novella* Bergroth 1911 in having the legs and antennae strikingly spotted with black-brown and in relation of antennal joints. In *C. novella* Bergroth the second antennal joint is twice shorter than the third, while in *C. brevispina*, sp. n. it is only 1.5 times shorter. It differs from *C. lobulata* Bergroth 1909 in having the ventral side of the body black-brown and rostrum reaching between the posterior coxae. The most closely related and similar species are *C. etiennei* Schouteden, 1912, *C. vulgaris*, sp. n.,

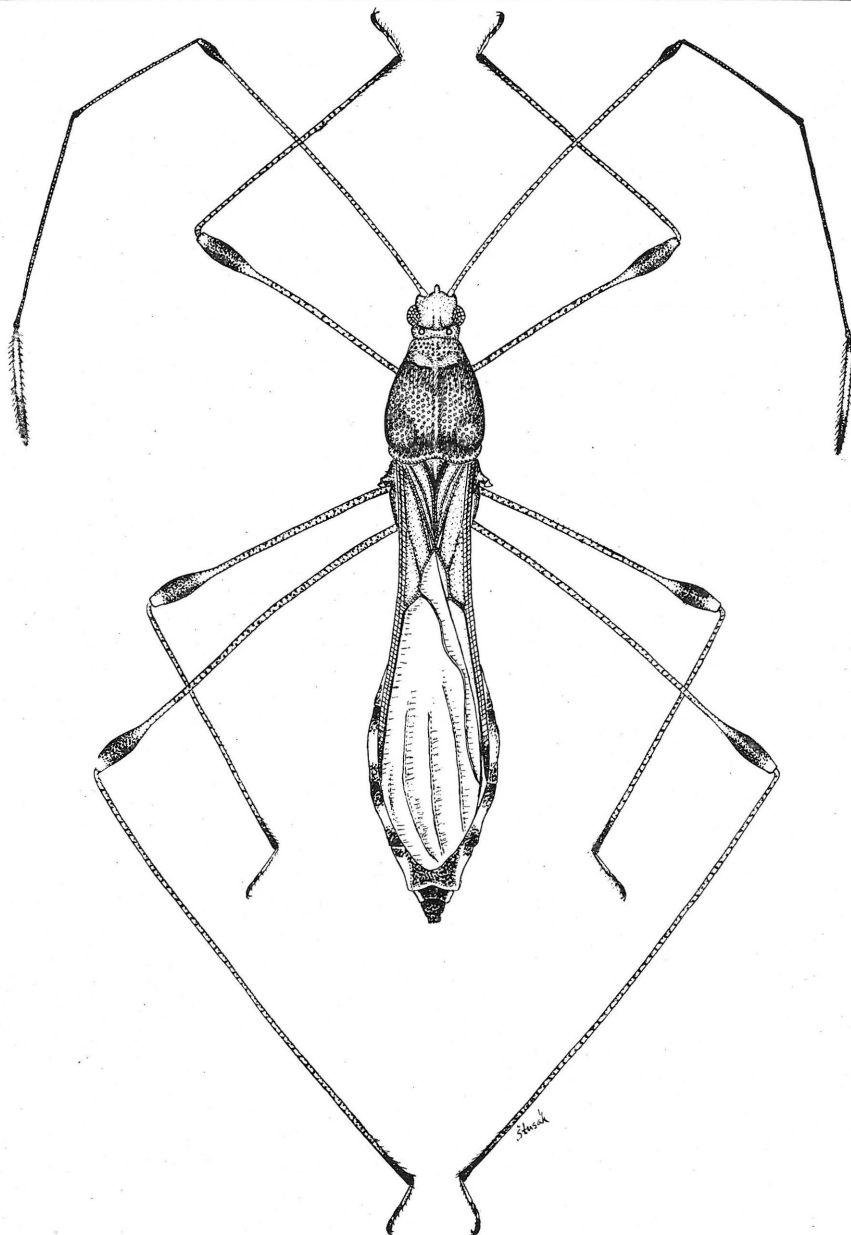


Fig. 39. *Capyella brevispina*, sp. n.

C. ambigua, sp. n. and *C. occidentalis*, sp. n., from which it may be distinguished by the strikingly spotted legs and antennae, by the small and short frontal spine and by shorter, more vaulted pronotum and more rounded lateral pronotal margins.

Capyella etiennei Schouteden, 1912

This species was described by Schouteden 1912 from one specimen taken 16. 6. between Kindu and Kibombo. In the material from the collections of the Musée Royal de l'Afrique Centrale, Tervuren six specimens of this species were found and compared with the holotype.

It is necessary to complete Schouteden's (1912) description by adding the following characters: This species has long and narrow ostiolar processes (fig. 40, 44); it differs in this character from the other related species described in this paper. Bucculae are not prominent, i. e. they do not extend beyond the level of the anteclypeus. The second antennal joint is distinctly longer than the fourth joint. Humeral angles of the pronotum are low (not high elevated as in *C. malacaipus* (Stål), *C. iturica* [Schout.] and *C. martae*, sp. n.) (fig. 29). Relation of antennal joints see table.

Material examined: Congo, between Kindu and Kibombo, 16. 6., Schouteden 1912, holotype (Musée Royal de l'Afrique Centrale, Tervuren).

Ruanda, terr. Nyanza, Mahembe, 1400 m., 13.—15. 1. 1953, leg. P. Basilewsky (1 ♂); Kivu, Mulungu, 1938, leg. Hendrick (1 ♀); Kivu, Katana, 26. 10. 1932, leg. L. Burgeon (1 ♂); Ituri, Angodra, 19. 2. 1930, leg. A. Col-lart (1 ♂); Ruanda, terr. Nyanza, Kinazi, 1600 m., 5.—8. 1. 1953, leg. P. Basilewsky (1 ♂); Rutshuru, 8. 4. 1936, leg. L. Lippens (1 ♂); Urundi, Kitega, 1600—1700 m., 3.—4. 3. 1953, leg. P. Basilewsky (1 ♀).

Capyella vulgaris, sp. n.

Derivation of name: This species was named *C. vulgaris* from the fact that it was the most abundant species in the examined material. It occurs in practically all parts of Congo, Rwanda and Burundi.

Type locality: Congo, Lokandu.

Holotype (♂) in collections of the Musée Royal de l'Afrique Centrale, Tervuren.

Diagnosis: This new species belongs to the group of *Capyella*-species in which the rostrum reaches to the posterior coxae, humeral angles are not high cone-shaped elevated but only moderately vaulted; legs and antennae very fine; less strikingly spotted with brown-black, the frontal spine well developed, ostiolar processes of median length, more robust, reaching almost to the level of hemielytra. Only the tip of the fourth antennal joint is black.

Description: General colour ochreous brown to dark rust brown. It is a verily similar species in general shape, colour and size to *C. etiennei* Schout. and *C. ambigua*, sp. n. Head between the bases of antennae is similarly armed with well developed spine. Bucculae not extending beyond the level of anteclypeus. Antennae very long, narrow as in related species. The fourth antennal joint whitish with rusty brown basis and blackened apex (fig. 35). In males the second antennal joint is either equal in length, or shorter than the fourth joint. In females it is moderately longer than the fourth. Relation of antennal joints: 110: 35: 79: 40

(holotype ♂), in other specimen 110: 40: 79: 40 (♂), in female 110: 39: 81: 36 (see table I.). Scutellum armed with a short horizontal spine. Hemelytra, legs and abdomen as in the species *C. etiennei* Schout.

Measurements: (holotype) Length of body 6.67 mm., maximal width of body (abdomen) 1.11 mm., width of head 0.53 mm., length of pronotum 1.34 mm., width of pronotum 0.94 mm., length of antenna 11.23 mm. (I: II: III: IV = 4.68 mm.: 1.49 mm.: 3.36 mm.: 1.70 mm.).

leg	femur	tibia	tarsus
anterior	3.02 mm.	3.61 mm.	0.68 mm.
middle	3.32 mm.	3.91 mm.	0.70 mm.
posterior	4.85 mm.	6.63 mm.	0.72 mm.

Material examined: Congo: Lokandu, 3. 1939, leg. Capt. Marée (holotype ♂); Eala, 1. 1930, leg. H. J. Brédo, on cacao (1 ♀); Eala, 4. 7. 1932, leg. A. Corbisier (1 ♂); Equateur, Bokuma, 7. 1952, leg. R. P. Lootens (1 ♂); Tshuapa, Bokuma, 2. 1954, leg. R. P. Lootens (1 ♂); Kikwit, 1920, leg. P. Vanderijst (1 spec.); Kikwit, 1920, leg. P. Vanderijst (allotype ♀); Equateur, de Botende a Yolombo, 10. 1927, leg. R. P. Hulstaert (1 ♂); riv. Lomela, 6. 1936, leg. J. Ghesquière (1 ♀); Lokandu, 3. 1939, leg. Capt. Marée (1 ♀); Kindu, 11. 1913, leg. L. Burgeon (3 ♂♂, 1 ♀); Bassin Lukuga, 1935, leg. H. De Saeger (2 ♂♂, 1 ♀); Lubutu, 13. 3. 1911, leg. L. Burgeon (1 ♂); Kivu, Uvira, bord du lac, 6. 1958, leg. G. Marlier (1 ♀); Ituri, Forêt de Kawa, 14. 4. 1929, leg. A. Collart (1 ♂); Ituri, Bunia, 1938, leg. P. Lefèvre (1 ♀); Ruanda, Kissenyi, 4. 11. 1925, leg. H. Schouteden (1 ♂); Mulongo (Niunzu), 20.—30. 5. 1930, leg. P. Gérard (1 ♂); Sankuru, Kome, 12. 1929, leg. J. Ghesquière (1 ♀); Sankuru, Kome, 1. 1930., leg. J. Ghesquière (1 ♂).

Discussion: *Capyella vulgaris*, sp. n. is very similar to *C. etiennei* Schout., *C. ambigua*, sp. n. and *C. occidentalis*, sp. n. in general size, shape and colour. It differs from the related species as follows:

It may be distinguished from *C. etiennei* Schout. by its shorter and more robust ostiolar process (fig. 41, 45) and by other relation of antennal joints (especially II: IV joints). From *C. ambigua*, sp. n. by not having the distal half of the fourth antennal joint black; in *C. vulgaris*, sp. n. only the apex is blackish. It also differs from *C. ambigua*, sp. n. in not having the second antennal joint distinctly shorter than the fourth. It differs from *C. occidentalis*, sp. n. especially in having longer ostiolar processes reaching approximately to the level of hemelytra, etc. From *C. brevispina*, sp. n. in having the frontal and scutellar spines well developed, in less vaulted pronotum, in the relation of the third and second antennal joints and in not having the legs and antennae strikingly spotted with black.

***Capyella ambigua*, sp. n.**

Derivation of name: ambiguus = suspicious.

Type locality: Congo, Masua (Lubutu).

Holotype (♂) in collections of the Musée Royal de l'Afrique Centrale, Tervuren.

Diagnosis: This new species belongs to the group of *Capyella*-species in which rostrum reaches to the posterior coxae, humeral angles of the pronotum are not highly elevated, antennae and legs are very finely and lightly brown-black spotted (almost without spots), the frontal spine is long, slightly downwards curved, ostiolar processes medium long.

Description: General colour as in the other species of this genus, i. e. rusty brown to brown-black. Also in the general shape very similar to the related species *C. etiennei* Schout., *C. vulgaris*, sp. n. and *C. occidentalis*, sp. n. The head between the antennae armed with a long downwards moderately curved spiniform process which is gradually tapered to its tip. The bucculae not prominent, i. e. not extending beyond the level of anteclypeus. Antennae long, in holotypus 1.17 longer than the body, the first antennal joint being approximately as long as half of the body and only moderately longer than the second and third joint measured together. Apices of the second and third joints moderately enlarged and black-brown. The second antennal joint is much more shorter than the fourth and at least one half shorter than the third joint. The fourth joint whitish in colour with its apical half black-brown (fig. 36). Relation of the antennal joints: I: II: III: IV = 94: 29: 60: 40 (in holotype); 90: 23: 53: 34 (in paratype).

Pronotum approximately 1.4 times as long as wide, roughly punctured, almost of the same shape as in related species. Scutellum armed with a slender spine directed almost horizontally. The length of the spine is almost the same as the length of the scutellum. Legs light ochreous, lighter than the other body parts and covered with very fine and light brown-black spots. Apical clavae of femora dark rusty brown. Posterior femora extending slightly beyond abdomen. Hemielytra shorter than the abdomen, apex of corium dark. Abdomen black-brown with yellowish spots on the connexivum.

Measurements: (holotype) Length of body 8.08 mm., maximal width of body (abdomen) 1.15 mm., width of head 0.51 mm., length of pronotum 1.49 mm., width of pronotum 0.96 mm., length of antenna 9.48 mm. (I:II: III: IV = 4.00 mm.: 1.23 mm.: 2.55 mm.: 1.70 mm.).

leg	femur	tibia	tarsus
anterior	3.19 mm.	3.49 mm.	0.62 mm.
middle	3.61 mm.	3.91 mm.	0.65 mm.
posterior	5.19 mm.	6.89 mm.	0.68 mm.

Material examined: Congo: Masua (Lubutu), 9. 9. 1929, leg. A. Collart (holotype ♂); Mongbwalu (Kilo), 7. 1938, leg. Mme Scheitz (1 spec., paratype).

Discussion: This species is very similar to the species *C. etiennei* Schout., *C. vulgaris*, sp. n. and *C. occidentalis*, sp. n. It may be distinguished as follows:

It differs from *C. etiennei* Schout. in having the ostiolar processes shorter and more robust, the second antennal joint distinctly shorter than the fourth and in having the distal half of the fourth antennal joint black. It differs from *C. vulgaris*, sp. n. in having the distal half of the fourth

antennal joint black and in the strikingly short second joint. From *C. occidentalis*, sp. n. in having longer and differently shaped ostiolar processes and the colour of the fourth antennal joint.

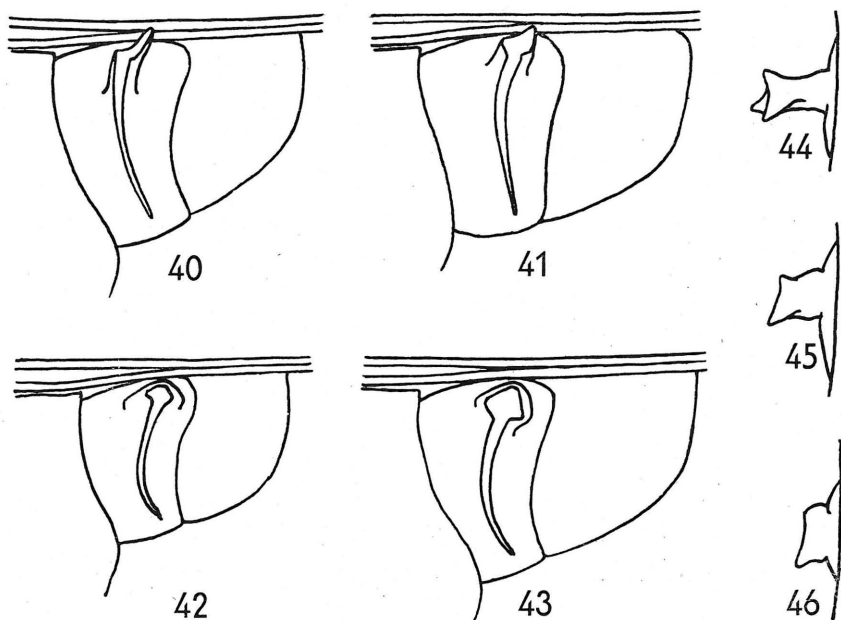


Fig. 40—43. Lateral view on the left ostiolar process.

Fig. 40. *Capyella etiennei* Schout. Fig. 41. *Capyella vulgaris*, sp. n. Fig. 42. *Capyella occidentalis*, sp. n. Fig. 43. *Capyella occidentalis*, sp. n.

Fig. 44—46. Left ostiolar process in dorsal view.

Fig. 44. *Capyella etiennei* Schout. Fig. 45. *Capyella vulgaris*, sp. n. Fig. 46. *Capyella occidentalis*, sp. n.

***Capyella occidentalis*, sp. n.**

Derivation of name: This species is named *C. occidentalis* by reference to its distribution. It occurs in the Western part of the Congo and in Angola.

Type locality: Angola, Benza Mazola.

Holotype (♂) in collections of the Musée Royal de l'Afrique Centrale, Tervuren (Belg.).

Diagnosis: This new species belongs to the group of *Capyella*-species in which the rostrum is long; reaching to the posterior coxae. Humeral angles are not high cone-shaped, but roundly vaulted. Legs and antennae with poorly distinct tiny dark spots. Ostiolar processes very short and wide with obtuse rounded apex; they do not reach to the level of hemelytra.

Description: General colour light ochreous brown to rust brown as in related species. Head between the antennae armed with well developed

long frontal spiniform process which is strongly curved downwards, hook-shaped. Bucculae do not extend beyond the anteclypeus. Antennae very long and thin, about 1.5 times as long as the body. The first antennal joint is longer than half of the body, clavate at its apex. Also apices of the second and third joints moderately enlarged. The fourth antennal joint whitish with black tip. Relation of antennal joints: I: II: III: IV = 110: 37: 76: 31.

Pronotum of similar shape and structure to related species. Scutellum armed with a small spine directed horizontally. Apex of corium blackish. Hemelytra slightly shorter than the abdomen. Legs light ochreous with small, distinct, sporadic, dark punctures. Apical clavae of the apices of femora rusty brown, the portions before the clavae and the apices of femora with light yellow-ochreous rings. Tibiae with dark enlarged apices.

Measurements: (holotype) Length of body 6.93 mm., maximal width of body (abdomen) 1.34 mm., width of head 0.53 mm., length of pronotum 1.38 mm., width, of pronotum 0.95 mm., length of antenna 10.81 mm. (I: II: III: IV = 4.68 mm.: 1.58 mm., 3.23 mm.: 1.32 mm.).

leg	femur	tibia	tarsus
anterior	3.05 mm.	3.49 mm.	0.68 mm.
middle	3.25 mm.	3.72 mm.	0.73 mm.
posterior	5.14 mm.	6.59 mm.	0.75 mm.

Material examined: Angola, Benza Mazola, 13. 5. 1913, leg. R. Mayné (holotype ♂); Congo, Mayumbe, Tshela, 13.—27. 2. 1916, leg. R. Mayné (4 ♂♂, 2 ♀♀, 1 spec.); Mayumbe, Zobe, 4.—12. 1. 1916, leg. R. Mayné (2 ♂♂, 1 ♀).

Discussion: This species is related to the species *C. etiennei* Schout., *C. vulgaris*, sp. n. and *C. ambigua*, sp. n. It may be distinguished from them by having very short robust ostiolar processes, a somewhat wider body and by the strongly hook-shaped frontal spine.

Relation of antennal joints of some *Capyella*-species.

Species		Relation of antennal joints		
		III:II	II:IV	III:IV
<i>Capyella etiennei</i> Schout.	♂	1.70—1.98	1.07—1.36	2.10—2.38
	♀	1.88—1.98	1.20—1.53	2.45—3.02
<i>Capyella vulgaris</i> , sp. n.	♂	1.98—2.31	0.86—1.01	1.90—2.21
	♀	1.92—2.25	1.03—1.12	2.17—2.38
<i>Capyella ambigua</i> , sp. n.		2.07—2.30	0.67—0.72	1.50—1.55
<i>Capyella occidentalis</i> , sp. n.		1.98—2.16	1.12—1.19	2.36—2.45

Neometacanthus, n. gen.

Derivation of name: The name of this genus is formed from the Greek prefix and from the name of existing Berytid genus.

Type locality: Congo.

Type-species: *Neometacanthus congoensis*, sp. n. by monotypy.

Description: Body very long and slender. Head almost as wide as long, unarmed, i. e. without any processes; vertex is divided from clypeus by a transverse furrow. Pronotum very coarsely structured with small hexagons, it is only moderately longer than wide, without any processes. Scutellum armed with spiniform process. Scutellum is distinctly wider than long. Ostiolar processes extending far beyond the level of hemielytra. Hemielytra well developed, reaching approximately to the end of the abdomen. Antennae much more longer than the body, the second antennal joint shorter than the third. The distance between the ocelli is much more longer than the distance between the posterior margin of the eye and ocellus. Posterior femora extending beyond apex of abdomen. The fourth antennal joint is narrow, almost cylindrical (not spindle-like). Rostrum long; reaching approximately to the posterior margin of hind coxae. The first rostral joint is shorter than the ventral side of the head, i. e. it does not reach to the anterior margin of the prothorax.

Discussion: This new genus is related to the genus *Metacanthus* Costa; it differs, inter alia, especially by the shape of the fourth antennal joint, by relation of the second and third antennal joints, by shape of head and pronotum etc.

Neometacanthus congoensis, sp. n.

Derivation of name: This new species is named *N. congoensis* in reference to the territory where it has been found.

Type locality: Congo, Vista.

Holotype (♂) in collections of the Musée Royal de l'Afrique Centrale, Tervuren.

Diagnosis: Pronotum unarmed, i. e. without any spines or processes, humeral angles of the pronotum only moderately elevated. Head between the antennae unarmed — without spine. The second antennal joint distinctly shorter than the third. The fourth antennal joint narrow, cylindrical, whitish coloured with black base.

Description: General colour light ochreous-yellow. Head is almost as wide as long (or moderately longer), light yellow-ochreous dorsally. Vertex is very little convex. The greater part of the clypeus, bucculae, the ventral side of head and also the lateral portions of the head behind the eyes are dark brown. Eyes relatively large. The anteocellary sulcus well developed, ocelli reddish coloured. Antennae almost 1.8 times as long as the body, very thin. The first antennal joint moderately curved and approximately 0.75 as long as the body, clavate at its apex. It is light yellow-ochreous, only the clava is dark brown, except the apex which is light again. Also the second and third joints are light yellow-ochreous except their moderately enlarged apices which are dark. The second

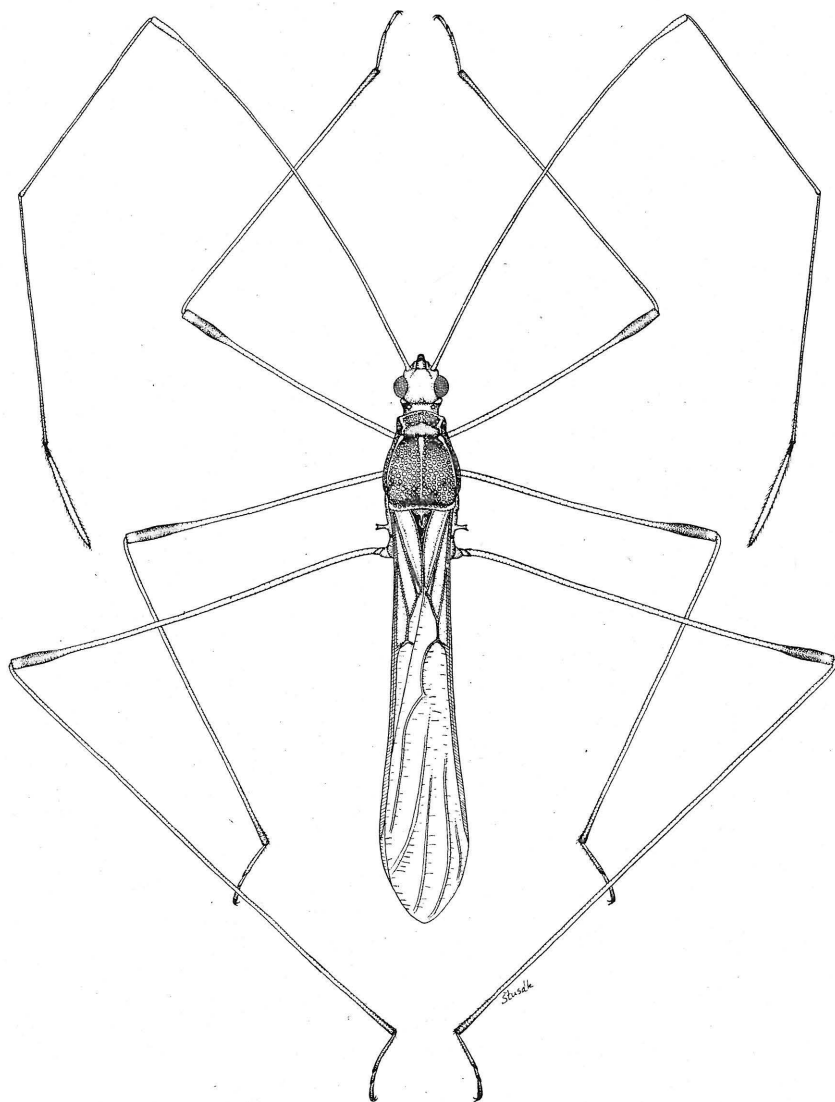


Fig. 47. *Neometacanthus congoensis*, sp. n.

antennal joint is distinctly shorter than the third. The fourth joint is whitish or moderately yellowish, only its base is dark brown and its apex shades gradually into a light rusty ochreous colour. Relation of antennal joints: 103: 50: 56: 26 (♂); 98: 48: 55: 28 (♀). Rostrum light ochreous only the apex of the fourth rostral joint is blackbrown. The first rostral joint reaches to the level of ocelli. Relation of the rostral joints: I: II: III: IV = 12: 11: 10: 11.

Pronotum approximately 1.3 times as long as its maximal width, very coarsely structured with very tiny hexagons. The anterior margin of the pronotum is almost straight with its middle moderately projected forward (i. e. very moderately convex). Posterior pronotal margin concave. Humeral angles of the pronotum only very moderately convex and also a very moderate elevation is situated between them medially. A median carina running from the pronotal callosities is rather indistinct, especially on the posterior portion of the pronotum. Also the lateral carinae are much more distinct in their anterior portions. Scutellum armed with a spine which is directed obliquely upwards and of medium length. The

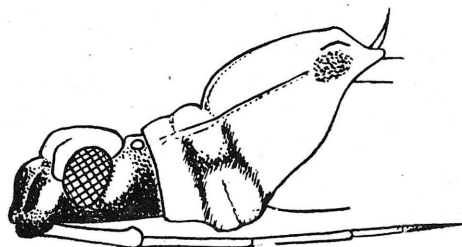


Fig. 48. *Neometacanthus congoensis*, sp. n., lateral view.

ventral side and the lateral portions of meso- and metathorax black-brown.

Ostioles light ochreous, slender and long, curved backwards at their apices; they extend beyond the level of the hemielytra. Hemielytra approximately reaching to the end of the abdomen (in males sometimes longer, in females sometimes shorter than the abdomen). Hemielytra light yellowish, transparent, with some portions of veins and membrane of dark brownish colour. Dorsal and ventral sides of abdomen light ochreous. Coxae, trochanters and femora light yellowish ochreous, clavae of femora rust brown with light apices. Tibiae light yellow-ochreous with enlarged and black-brown apices. The distal ends of tarsi dark. The first tarsal joint is longer than the second and third joints together; the second and third joints approximately equal in length.

Measurements: (holotype) Length of body 5.57 mm., maximal width of body (in 2/3 of hemielytra) 0.89 mm.: length of head 0.62 mm., width of head 0.55 mm., length of pronotum 0.98 mm., width of pronotum 0.77 mm., length of antenna 10.00 mm. (I: II: III: IV = 4.38 mm.: 2.13 mm.: 2.38 mm.: 1.11 mm.).

leg	femur	tibia	tarsus
anterior	2.55 mm.	3.19 mm.	0.63 mm.
middle	2.81 mm.	3.40 mm.	0.65 mm.
posterior	4.25 mm.	5.36 mm.	0.68 mm.

Material examined: Congo, Vista, 13. 8. 1920, leg. H. Schouteden (holotype ♂); Boma, 20. 11. 1929, leg. H. Schouteden (1 ♂); Terr. Rutshuru,

18. 8. 1937, leg. Miss Prophylactique (1 ♀); Tanganyika, Kilimandjaro (Sjöstedt), 1905, leg. H. Schouteden (1 ♀).

Metacanthus tenerrimus (Bergroth, 1912)

This species was described by Bergroth 1912 from Madagascar and found later by Schouteden [1957] in Burundi (Urundi, Makaronkwe). In the examined material from collections of the Musée Royal de l'Afrique Centrale, Tervuren (Belgique) there were found specimens (about 10) from Congo, Rwanda and Burundi which seem to correspond with Bergroth's description. Unfortunately I have not so far been able to compare them with the type. They are, then, not definitely determined.

Metacanthus sp.

In the material from collections of the Musée Royal de l'Afrique Centrale, Tervuren (Belgique) there were four specimens looking like *M. tenerrimus* (Bergroth), but they differ especially in having the legs and antennae annulated with black-brown. According to Bergroth's description in the imago of the species *M. tenerrimus* the legs are light unicolorous, without dark annulations. In its nymph, however, the legs are dark annulated. A question poses itself; to what degree this annulation can remain as a rudiment in the imago, or if it always disappears after the metamorphosis to imago.

Key to identification of Berytid-species of Congo (Léopoldville), Rwanda and Burundi

- 1 [2] Each of the humeral angles of the pronotum armed with one wide and large spiniform process. The frontal portion of the head between the bases of antennae is strongly compressed from the sides whereby a high carina-shaped comb [not of process-shape] arises in these places. Mesothorax very large, almost spherical in shape (especially in males). Dimorphic species. Legs of males armed with large spiniform cogs.
Dimorphoberytus variabilis, sp. n.
- 2 [1] The humeral angles of the pronotum without spiniform processes, maximally with conical tubercle-like elevations or without any elevations. The frontal portion of the head armed with a forward directed spine or process situated between the antennae, or unarmed. Mesothorax is not greatly enlarged. Legs of males and females without any spines — unarmed.
- 3 [24] Between the bases of the antennae the head is armed with a spine or process directed forward.
- 4 [7] Head armed with a strong robust process directed forward which is not spine-like. The anterior margin of the pronotum is not convex, but straight or moderately concave. Hemelytra extending beyond apex of the abdomen. Venation of hemelytra see fig. 15.
- 5 [6] The strong robust forward directed frontal process is almost straight. The first rostral joint reaching to the prothorax and as long as the fourth one.
Paraberytus mirabilis, sp. n.
- 6 [5] The strong robust frontal process of the head is not straight, but curved obliquely downwards at its apex. The first rostral joint reaching only to the level of ocelli; it is somewhat shorter than the fourth joint.
Paraberytus similis, sp. n.
- 7 [4] Between the antennae the head is armed with a spiniform process, usually pointed at its apex. The anterior margin of the pronotum convex. Hemelytra usually somewhat shortened not reaching the apex of the abdomen. Hemelytral venation of different type than in fig. 15.

- 8 [9] The antennae distinctly shorter than the body, the first antennal joint being much more shorter than half the length of the body. Posterior femora do not extend beyond the apex of hemielytra. In the level of humeral angles of the pronotum there are situated three high and large conical tubercles equal in shape and size. **Neocapyella basilewskyi**, sp. n.
- 9 [8] The antennae distinctly longer than the body, the first antennal joint being half as long as the body, or longer. The posterior femora extending beyond apex of the abdomen. In the level of humeral angles of the pronotum there are either three high conical tubercles (two humeral tubercles, one between them), the median one being lower and smaller, or two high humeral tubercles, or only the humeral angles are moderately elevated.
- 10 [15] Humeral angles of the pronotum very elevated into high and large conical tubercle on each angle.
- 11 [12] Pronotum coloured light straw-yellow, the high humeral elevations pitchy black. Pronotum structured with tiny hexagons (coarsely punctured), the structure of the humeral tubercles being much larger than the structure on the other portions of the pronotum. **Capyella martae**, sp. n.
- 12 [11] Pronotum of the same colour as the other body parts, i. e. light rusty brown to brown-black, also the humeral conical elevations are unicolorous with the pronotum. The surface structure of the humeral tubercles is equal in size to the structure of the other portions of the pronotum.
- 13 [14] The apical clavate portions of femora brown; femora tibiae and antennae spotted with black. The spots are less dense and less intense than in the following species. The apical angle of the prolonged portion of corium with very intense black hue which does not blend gradually into the light colour of the preceeding portion of the corium (fig. 38) **Capyella malacaius** (Stål)
- 14 [13] The apical clavate portions of femora pitchy black (except the apex). Femora, tibiae and antennae with intense black spots which are much more dense and more marked than in the preceeding species (fig. 31). The apical angle of the prolonged portion of corium black-brown which blends gradually into light colour of the preceeding portion of the corium (fig. 37). **Capyella iturica** (Schouteden)
- 15 [10] Humeral angles of the pronotum only very moderately elevated, in shape of low roundish elevations.
- 16 [17] Legs strikingly spotted with black, the frontal spine very small, straight and short; pronotum relatively short, more vaulted and more rounded on the lateral margins than in the following species. The spine of the scutellum almost absent. Relation of the third and second antennal joints (III: II) approximately 1.5 (less than 1.7). **Capyella brevispina**, sp. n.
- 17 [16] Legs with very small fine brown spots which are often indistinct, or without spots. The frontal spine of varied shape, but always long and strong, mostly straight or curved downwards. Pronotum longer, less vaulted and more flat, less rounded at the lateral margins. Relation of the third and second antennal joints more than 1.7.
- 18 [19] Ostiolar processes long (fig. 40, 44). The second antennal joint distinctly longer than the fourth. Relation of antennal joints see table. **Capyella etiennei** Schouteden
- 19 [18] Ostiolar processes short (fig. 41, 42, 43, 45, 46) and less slender.
- 20 [23] Ostiolar processes somewhat longer reaching the level of hemielytra (fig. 41, 45). The frontal spiniform process only moderately curved downwards or straight, not hook-shaped.
- 21 [22] Only the apex of the fourth antennal joint is blackish (fig. 35). The second antennal joint is insignificantly longer than the fourth in females, in males is equal to, or somewhat shorter than the fourth antennal joint. Relation of antennal joints see table. **Capyella vulgaris**, sp. n.
- 22 [21] Almost the distal half of the fourth antennal joint is black-brown. The second antennal joint is much more shorter than the fourth. Relation of antennal joints see table **Capyella ambigua**, sp. n.

- 23 (20) Ostiolar processes very short, they do not reach the level of hemielytra, very depressed (fig. 42, 43, 46). The frontal spiniform process is strongly hook-shaped and curved downwards. The second antennal joint is longer than the fourth. Relation of antennal joints see table. **Capyella occidentalis**, sp. n.
- 24 (3) Head between the bases of the antennae without any spine or process — unarmed.
- 25 (26) The second antennal joint distinctly shorter than the third. The fourth antennal joint narrow, cylindrical, whitish coloured, only its basis is black. **Neometacanthus congoensis**, sp. n.
- 26 (25) The second antennal joint is not shorter than the third; the fourth antennal joint is spindle-like, i. e. strikingly enlarged in the middle. Minimally the basal half of the fourth antennal joint is black. **Metacanthus tenerrimus** (Bergroth)

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