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NEOTROPICAL MIRIDAE. LVI. DESCRIPTION OF THREE NEW GENERA AND FIVE NEW SPECIES FROM BRAZIL AND BRITISH HONDURAS (Hemiptera)¹

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(With 10 text-figures)

This paper contains the description of new genera and species of Neotropical *Miridae* found in the Collection of the British Museum (Natural History) and collected by the author at Oiapoque, Amapá and at the Xingu-Koluene confluence, Mato Grosso, Brazil.

The new genus Kamaiurana shows a certain ant mimicry and was collected in a place where a large number of ants could be found. This genus is being placed amongst the *Resthenini* due to its ostiolar peritreme, collar and general aspect.

The author wishes to acknowledge Dr. W. E. CHINA from the Dept. of Entomology, British Museum of Natural History for the loan of specimens belonging to that Museum.

Kamaiurana n.g.

Characterized by its pronotum narrowed at middle and almost as long as wide, long legs and antennae, coxal cleft of anterior pair visible from above and the very short and scanty pubescence.

Body elongate, opaque, with very short and scanty pubescence, almost glabrous. Head wider than long, vertex smooth, eyes prominent and small, in contact with the collar, frons inclined with a few erect and short hairs; head seen from the side much higher than long, clypeus vertical, upper lip fairly large, antennae inserted level with inferior third of eye a little above base of clypeus. Rostrum reaching the middle coxae, segment I reaching base of head.

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Pronotum a little longer than wide at base, narrowed at middle, posterior margin widely sinuate, posterior angle rounded, lateral margins rounded and strongly inclined, the anterior coxal cleft seen from above, calli obsolete, collar very wide, almost as wide as length of one eye, disc of pronotum slightly carinate at middle. Mesoscutum large and prominent, widely exposed. Scutellum short and acute at apex.

Hemielytra slightly narrowed at middle, veins, distinct, cuneus very short, about as long as wide at base, veins of membrane thick with well marked areolae.

Antennae long and fine, segment I glabrous, as long as pronotum longitudinally, incrassate towards its base, the remaining segments with approximate same thickness. Legs slender and long, especially the hind pair, covered by short hairs. Hind tarsi with first segment about as long as the third, arolia free and divergent.

Type of genus: Kamaiurana xinguensis n.sp.

This genus is placed in the tribe *Resthenini* due to its wide collar, ostiolar peritreme small, its dorsal margin situated below the ventral margin of mesepimeron. The collar is strongly convex as in the other genera of this tribe and the body surface smooth and opaque.

Kamaiurana xinguensis n.sp.

(Fig. 1)

Characterized by its colour and very short pubescence.

Female: Length 4.2 mm., width 1.2 mm., *Head*: length 0.2 mm., width 1.0 mm., vertex 0.55 mm. Antennae: segment I, length 0.5 mm.; II, 1.7 mm.; III, 1.3 mm.; IV, 1.1 mm. *Pronotum*: length 0.6 mm., width at base 0.8 mm. *Rostrum*: length 1.1 mm.

Colour: Brown with whitish areas; basal half of corium and embolium, cuneus (except extreme apex), small spot inferiorly at base of abdomen between hind coxae, white; first antennal segment, 3rd segment of rostrum, extremity of tarsi, eyes and apex of cuneus, black to fuscous; anterior half of body brownish red, hemielytra with apical half brownish fuscous, legs dark brown.

Body very shortly pubescent, almost glabrous, posterior legs fairly long. Male: Unknown.

Holotype: Female, "Confluencia Xingu Koluene, Mato Grosso, Brasil, 6-947, J. C. M. Carvalho col. *Paratype*: female, Cerrado Kalapalo, Koluene, Mato Grosso, Brasil, J. C. M. C. col. 1947, in the Collections of the Author and of the National Museum, Rio de Janeiro.

This species has a certain ant-like appearence, especially with respect to its colour. This may be explained as a protective adaptation to its habitat where one can collect a large number of ants and also other myrmecomorphic species of mirids and coreids.

Amazonocoris n.g.

Phylinae, Hallodapini, characterized by the large size of eyes which reach the gula inferiorly and are pilose, antennae with segments robust with approximate same thickness, long and erect pubescence of body.

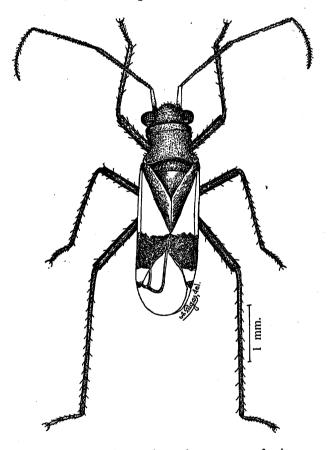


Fig. 1 - Kamaiurana xinguensis n.g., n.sp., female.

Body elongate, covered by very long, esparse and erect pubescence. Head with a very narrow vertex, smooth posteriorly; eyes very large, strongly granulose and pilose, removed from pronotum by a short distance, reaching the gula below; seen from front the head is roundish, the internal margin of eye strongly sinuate near antennal insertion; seen from the side, the eyes occupy the whole lateral portion of head (xecept jugum, lorum, clypeus and buccula), narrowing towards the gula; clypeus not prominent, rostrum reaching the base of posterior coxae. Antennae inserted near the inferior third of eye, strong and with segments of approximate same thickness, segment I narrowed towards the base, with a few long setae, segment II very slightly incrassate towards apex densely covered by a very short pubescence, segment III shorter and thinner than II, with same type of pubescence, fourth mutilate.

Pronotum finely punctate, posterior margin widely arcuate and covering mesoscutum, lateral margins rounded and strongly inclined, calli obsolete, collar of the depressed type, narrow. Scutellum convex with acute apex.

Hemielytra finely punctate, showing two more noticeably rows of punctures on clavus and one over embolium corial commissure, cuncus about as long as wide at base, embolium a little widened towards apex, explanate. Legs relatively fine and long, covered with short and long, erect hairs intermixed (spines on tibiae and setae on femora), claws very long and slender, toothed at base, pseudarolia very minute, practically invisible. Abdomen with long and erect setae below, ostiolar orifice with a large peritreme.

Type of genus: Amazonocoris longipilosus n.sp.

This genus has a certain resemblance with Ceratocapsus Reuter (Orthotylinae) and also with Hallodapus Fieber. I place it amongst the Hallodapini possessing a white transversal mark on hemielytra in spite of the fact that this mark is not so distinct as in most genera of this tribe. It is close to Eucerella Poppius, differing from this genus by the pubescence of upper surface of body, length of rostrum and hyaline spines of tibiae.

Amazonocoris longipilosus n.sp.

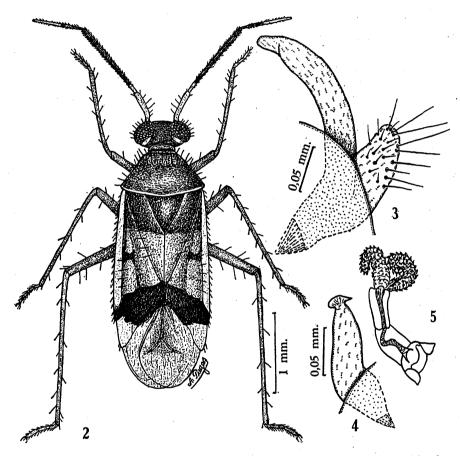
(Figs. 2-5)

Characterized by its colour and male genitalia.

Male: Length 3.2 mm., width 1.2 mm. Head: length 0.2 mm., width 0.7 mm., vertex 0,14 mm. Antennae: segment I, length 0.4 mm.; II, 1.3 mm.; III, 0.7 mm.; IV, broken. Pronotum: length 0.5 mm., width at base 1.0 mm. Rostrum: length 1.4 mm.

Colour: Testaceous; eyes brownish black; transversal spot on apex of corium and embolium, reddish brown; a median fascia on the hemielytra situated transversally between apices of scutellum and clavus, embolium and cuneus, hyaline to whitish; a lateral spot on corium and one internally on cuneus, whitish; apical half of third antennal segment, ostiolar peritreme, white; legs testaceous, bases of femora and coxae, lighter (except the anterior coxae which are reddish); underside of body light testaceous with reddish spots; segment I and base of II antennal segment hyaline; femora with vestiges of dark rings near the apex. Genitalia: Aedeagus (fig. 5) with two vesical spiny lobes. Left clasper (fig. 3) with the shape of a hand possessing only the thumb and indicator, the shorter portion or thumb-like with several long setae. Right clasper (fig. 4) smaller, ended by an expanded portion with a point turned inwards.

Female: Unknown.



Amazonocoris longipilosus n.g., n.sp. - Fig. 2: Male; fig. 3: left clasper; fig. 4: right clasper; fig. 5: aedeagus.

Holotype: Male, Lower Amazon, Monte Alegre, 17.IX.1933, J. G. Myers, Brit. Mus. 1933.400, in the Collection of the British Museum of Natural History.

Cylapoides n.g.

Cylapinae, Cylapini, characterized by its small size, body smooth, long, fine and erectly pubescent, vertex strongly carinate, first antenna shorter than width Body short and compact, long, fine and erectly pubescent. Head much wider than long, concave at middle, vertex strongly carinate, semilunar, covering the collar posteriorly, frons vertical, sulcate; eyes very large, shortly pedunculate, noticeably granulose, its upper margin well above level of vertex, turned backwards over the pronotum concealing the anterior angles; seen from the side the head is much higher than long. Rostrum reaching the posterior coxae, with segment I much stronger than the remaining and the following relative measurements I: 15, II: 20, III: 25, IV: 10, corresponding to 1.4 mm.

Antennae inserted in level with inferior third of eye, segment I shorter than width of vertex, slightly thicker than the second, tapering towards the base, segment II linear slightly thicker near base, segment III a little thinner than second, all segments covered by a fairly dense pubescence equal in length to about half the thickness of each segment.

Pronotum much wider than long, collar concealed by the vertex, calli small and confluent, posterior margin slightly bisinuate, lateral margins and posterior angles rounded, the latter covered by the eyes. Mesoscutum covered in the middle and exposed laterally, scutellum relatively large and convex.

Hemielytra with embolium poorly defined towards the apex, cuneus longer than wide at base. Legs fairly short, tarsus and claw of the Cylapini type, without arolia or pseudarolia.

Type of genus: Cylapoides bicolor n.sp.

This genus is close t_0 Corcovadocola Carvalho, 1948 from which it may be distinguished by the length of rostrum, relative length of antennal segments, head as wide as pronotum at base, eyes pedunculate and body pubescence much longer and stronger.

Cylapoides bicolor n.sp.

(Figs. 6-9)

Characterized by its bicolour condition, long, fine and erect pubescence and male genitalia.

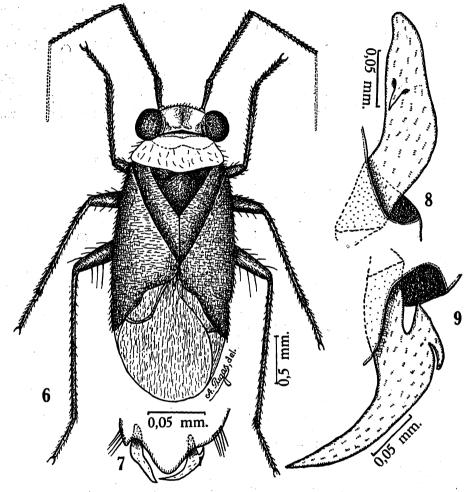
Male: Length 2.8 mm., width 1.4 mm. Head: Length 0.2 mm., width 1.0 mm., vertex 0.42 mm. Antennae: segment I, length 0.4 mm.; II, 0.9 mm.; III, 0.8 mm.; IV, broken. Pronotum: Length 0.4 mm.; width at base 1.0 mm. Rostrum: Length 1.4 mm.

Colour: Chestnut with head and pronotum milky white, membrane infumate.

Morphological characters as given for genus.

Genitalia: Aedeagus broken during dissection. Left clasper (fig. 9) falciform with two points on dorsal side remembering spines. Right clasper (fig. 8) simple, with an erect spine-like tubercle. Abdominal extremity as seen in figure 7.

Holotype: Male, British Honduras, Ponta Gorda, Oct. 1935, J. J. White, B.M. 1937 147, in the Collection of the British Museum of Natural History.



Cylapoides bicolor n.g., n.sp. - Fig. 6: Male; fig. 7: abdominal extremity; fig. 8: right clasper; fig. 9: left clasper.

Cylapoides unicolor n.sp. (Fig. 10)

Characterized by its colour and dimensions.

Female: Length 3.2 mm.; width 1.5 mm. *Head*: length 0.3 mm., width 1.1 mm., vertex 0.55 mm. *Antennae*: segment I, length 0.3 mm.; II, 0.9 mm.; III: 1.2 mm.; IV: 0.7 mm. *Pronotum*: Length 0.4 mm., width at base 1.1 mm. *Rostrum*: Length 1.7 mm.

Colour: Dark brown with areas tending to reddish; two apical thirds of first antennal segment, sub apical ring of second segment, third and fourth segments, head, eyes, pronotum, scutellum and sternum, dark brown; mesoscutum, hemielytra especially towards apex and base, cuneus, reddish brown; basilar plate of hemielytron red; apex of corium near cuneus, apex and basal half of second autennal segment, base of first segment, spot on the membrane near apex of cuneus, small spot on corial commissure, veins of membrane, yellow; membrane enfumate; legs and abdomen brown, the tibiae with a yellow median ring.

Vertex strongly carinated and covering posteriorly the collar; eyes pedunculated, turned backwards over the anterior angles of pronotum; first segment of rostrum much stronger than the remaining; legs with long setae on the femora.

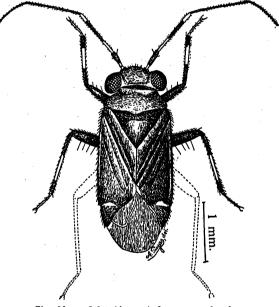


Fig. 10 - Cylapoides unicolor n.sp., female.

Male: Unknown.

Holotype: Female, Oiapoque, Territorio do Amapá, Brasil, J. C. M. Carvalho col. 1949, in the collection of the author.

This species differs from C. bicolor Carvalho especially in the colour of head and pronotum.

SUMÁRIO

Contem êste trabalho as descrições de três gêneros e cinco espécies novas de mirídeos neotropicais provenientes da coleção do Museu Britânico de História Natural ou colecionadas pelo autor no Oiapoque, Amapá e Confluência do Xingu-Koluene, Mato Grosso.

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NINHOS DE TUCUNARÉS, "CICHLA TEMENSIS" HUMBOLDT E "CICHLA OCELLARIS" BLOCH & SCHNEIDER (Actinopterygii, Cichlidae)¹

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(Com 4 figuras no texto)

Ninhos de peixe são, circunstanciadamente, estudados por WUNDER (1931). Êle se ocupa, entre muitas, de várias espécies de *Cichlidae*. Contudo, não faz referência especial aos tucunarés (fig. 1).

ROSTAND (1945) estuda a nidificação dos peixes, de modo geral. Preocupa-se, principalmente, com a classificação dos ninhos.

Outros autores referem $_0$ assunto ligeiramente. AZEVEDO (1938) o faz, falando da traíra, Hoplias malabaricus Bloch. E, FONTENELE (1949), do pirarucú, Arapaima gigas Cuvier, e dos tucunarés (Actinopterygii, Cichlidae) em cativeiro, de modo sucinto.

Ninhos de Cichla e Astronotus são, particularmente, estudados por SAWAYA & MARANHÃO (1946). FONTENELE (1951) refere-se, também, aos de apaiarí, Astronotus ocellatus Spix, resumidamente.

TIPO, FORMA E NÚMERO

Os ninhos de peixes são de vários tipos. Todos, porém, curiosos e interessantes. Alguns demonstram mesmo notável progresso e originalidade. ROSTAND (1945) divide-os em escavados, tecidos, casuais, de construção, de órgãos e de espuma. Ao primeiro tipo pertencem os ninhos de tucunarés.

Èles são simples cavidades feitas no sólo pelo peixe. Sua forma é, geralmente, circular. Alguns apresentam-se ovalados. E, outros ainda, sem forma característica. Em terreno argiloso as escavações são arredondadas e menores. E nos arenosos, de forma irregular e maiores. A circunstância é devida, naturalmente, à compactibilidade do sólo.

¹ Recebido para publicação a 16 de Junho de 1952.