ARKIV FÖR ZOOLOGI.

BAND 14. N:o 21.

New Neotropical Miridae (Hem.).

By

E. BERGROTH.

Communicated January 11th 1922 by CHR. AURIVILLIUS and Y. SJÖSTEDT

Among the undetermined materials of Miridae in the collection of the late Dr. EMIL HAGLUND, which has been acquired by the Stockholm Museum, I have found some undescribed species of the interesting subfamily Cylapinae and two remarkable forms of other groups. Descriptions of these species are given below.

Subfam. Cylapinae.

Cylapus citus n. sp. — Slightly shining, black, elytra fuscous-black, vertex, posterior half of genae, lateral angles of pronotum, apex of scutellum, an oblique, interiorly abbreviated antemedian fascia and apical angle of corium, base of cuneus, posterior margin of meso- and metapleura, and orificia luteous; antennae fuscous, base of third joint broadly white; rostrum pale piceous; legs fuscous, femora somewhat paler in hue, especially toward their base. Head seen from before somewhat higher than broad, eyes not much raised above vertex, their vertical diameter somewhat shorter than genae, vertex somewhat broader than an eye, antennae more than twice the length of body (incl. elytra), first joint as long as pronotum and head together and one-half longer than breadth of head, gradually and slightly incrassated from base to apex, second joint more than twice the length of

first, third considerably longer than second, fourth longer than second, but shorter than third. Pronotum with a rather short erect pilosity, lateral margins straight, basal margin also straight, oblique in front of elytral base, the disc rather coarsely and densely punctate, excepting the impunctate confluent calli which have a round median impression posteriorly. Scutellum rather convex, less distinctly punctate than the pronotum but with a similar pilosity. Corium and clavus very thickly and rather finely punctate, very finely pubescent, cuneus more than twice longer than broad. Legs very long, fore and middle femora narrowed toward apex, hind femora linear, as long as elytra, hind tibiae as long as body including elytra, first tarsal joint longer than the others together. Length, 4,5 mm., incl. tegm. 6 mm.

Upper Amazonas (Olivença). — Mus. Stockholm.

Remarkable by the very long antennae and legs. The length and structure or the rostrum cannot be seen in the carded type.

Cylapus ruficeps n. sp. - Slightly shining, above fuscous-black, beneath black, head rufous, corium with a large triangular subpical dull black area which anteriorly reaches nearly to middle of costal margin and posteriorly occupies the whole width of the corium, collar and extreme basal margin of pronotum, apex of scutellum, a vitta reaching from middle to apex of clavus, two spots of corium immediately before the dull black area (the outer one larger, obliquely transverse, the inner one smaller, obliquely longitudinal), apical margin of corium, basal margin of cuneus, posterior border of metasternum, metapleura (including orificia), base of venter and a fascia to its last two segments white; antennae, rostrum and legs black, last two antennal joints fuscous, base of third antennal joint and an annulation just behind middle of tibiae pale vellow, the annulation of the hind tibiae very much broader, extended almost to their apices. Head seen from before much higher than broad, eyes strongly raised above vertex, their vertical diameter half the length of genae, vertex twice broader than an eye, front pubescent, antennae almost twice the length of body (incl. elytra), first joint as long as pronotum and head together and one-half longer than width of head, gradually

and moderately incrassated from base to apex, second joint about twice the length of first, third a little longer than second, rostrum reaching base of ultimate ventral segment, pilose beneath, more densely and longly so on the two last joints, first and second joints of equal length, third somewhat shorter than the preceding ones together, fourth half the length of third. Pronotum rather shortly erectly palely pilose, lateral margins straight, basal margin a little rounded, the disc thickly punctate excepting the calli which are separated by a narrow linear impression. Scutellum strongly convex, sparsely punctate, pilose the same as pronotum. Corium and clavus rather thickly punctulate, subcrectly pubescent, cuneus about twice longer than broad. Venter palely pilose, male genital segment at apex on each side with a rather deep and narrow sinuosity. Fore femora narrowed toward apex. First tarsal joint considerably longer than the others together. Length, of 4,5 mm., incl. tegm. 6,5 mm.

Peru (Callanga). — Mus. Stockholm.

Somewhat allied to the preceding species, but with upwardly much more produced eyes, shorter antennae and legs, quite different colour-markings, etc.

Cylapus festinabundus n. sp. — A little shining, fuscous, head (except vertex), broad lateral borders of pronotum. costal margin of corium, propleurae, middle of meso- and metasternum, orificia and posterior margin of metapleura luteous, an oblong submedian spot to clavus and a large irregular area occupying the greatest part of posterior half of corium opaque, velvety fuscous-black, a spot at basal angles of scutellum and its extreme apex, veins of corium and clavus (except here and there where they run through the opaque spots), a small subcostal spot just behind middle of corium, apical angle of corium, and base of cuneus whitish, membrane with an oblong subhyaline spot at apex of cuneus. venter pale greenish, the base at the sides, the lateral margins and the male genital segment dark castaneous; antennae fuscous, first joint dingy testaceous, apex of second joint narrowly whitish; rostrum and legs brownish testaceous, hind femora with two or three rows of small fuscous spots, all tibiae fuscous-black toward apex,

in the apical half with a white annulation which is much broader in the hind tibiae. Head seen from before as high as broad, eves not much raised above vertex, their vertical diameter a little shorter than genae, vertex about two-thirds broader than an eye, first joint of antennae as long as breadth of vertex, narrowed at base, its exterior margin straight, the interior margin rounded, more so toward base. second joint about four times as long as first, third subequal in length to second, rostrum reaching base of venter, first two joints of equal length, third slightly shorter than second and distinctly longer than fourth. Pronotum with arcuately sinuate lateral margins, basal margin broadly and rather deeply bisinuate, the disc thickly punctate, excepting the calli which are separated by a posteriorly foveately deepened impression. Scutellum rather flat, broadly subimpressed in its anterior half, punctulate, rather longly erectly pilose. Corium and clavus sparsely erectly pilose, thickly punctulate except in the opaque areas, cuneus more than twice as long as broad. Venter pubescent, male genital claspers slender, sickle-shaped. Fore femora narrowed toward apex. First tarsal joint shorter than the others together. Length, 24.3 mm., incl. tegm. 5,5 mm.

Peru (Callanga) — Mus. Stockholm.

This and the following species do not seem to be nearly allied to any described form.

Cylapus labeculosus n. sp. — Above (except vertex and neck) opaque, rather sparsely pilose, beneath slightly shining, subglabrous. Head pale yellow variegated with fuscous, its blackish shining neck with two pale yellow vittae; seen from before the head is broader than high, eyes very large and prominent, but moderately raised above the vertex, their vertical diameter slightly longer than genae, vertex distinctly narrower than an eye, the clypeal prominenence distinct, the keel separating juga from genae rather strongly curved, the curve turning its convexity backwards, antennae fuscousblack, first joint dingy ochraceous with whitish base, as long as width of vertex, subparallel from apex to middle, then narrowed toward base, its exterior margin straight, interior margin slightly rounded, second joint paler toward base, considerably longer than second, rostrum fuscous-black,

about reaching middle of venter, first two joints subequal in length, third somewhat shorter than second, fourth as long as third. Pronotum fuscous, calli black, a small spot at interior and exterior end of calli, a small callose lateral spot at apical angles, a rounded lateral spot behind calli, posterior lateral border and exterior basal border, and two basal spots in front of mesoscutum pale yellow, all pale markings, except the anterior ones, more or less diffuse, lateral margins straight, basal margin broadly bisinuate, the disc coarsely and thickly punctate, excepting the calli which are separated by an impression. Mesoscutum fuscous with a curved pale keel on each side. The moderately convex, rather thickly punctured scutellum fuscous-black with a somewhat large spot at basal angles, an abbreviated longitudinal line, and apex whitish. Elytra fuscous-black, rather thickly and finely punctured, their base, apex of clavus, a short subcostal streak behind the base, a transverse costal spot before middle, a round spot of endocorium opposite the costal spot, an other round spot behind middle of mesocorium, an oblique spot at its apical margin, two or three subconfluent short vittae at apical angle of corium, the intero-basal area of cuneus, a spot to membrane within apex of cuneus, and a larger rounded spot just behind middle of membrane whitish, interior basal angle of cuneus narrowly rounded. Sterna pale vellow, propleura and metapleura variegated with pale yellow and fuscous, mesopleura with a large blackish area enclosing a pale yellow central spot. Abdomen beneath dark brown, the base, a broad inwardly much narrowing median fascia on each side and a little behind this a much narrower fascia on each side pale vellow. Legs fuscous. femora and tibiae with two white annulations, first tarsal joint slightly shorter than the two others combined; (fore legs wanting). Length, \$\infty\$ 5,5 mm., incl. tegm. 7,3 mm.

Amazonas (Fonteboa). — Mus. Stockholm.

This species is broader and less parallel than any other hitherto described species, and the keel at the posterior margin of the juga, which in most species is almost straight, is in *labeculosus* strongly curved.

N. B. — Cylapus clavicornis Popp., described from Peru, has also been found at Fonteboa.

Vannius podager n. sp. - Elongate, impunctate, shining and glabrous, excepting the opaque, sparsely and shortly pilose elytra. Piceous, scutellum and elytra red, clavus (except apex), a rather broad vitta on corium running from middle of costal margin to interior apical angle, exterior apex of corium (except extreme tip), interior base of cuneus and its apex pale lurid-testaceous, membrane palely fuscescent; antennae fuscous, first joint and base of second piceous, remainder of second joint whitish with a roseate subapical annulation; legs piceous, apex of fore and hind tibiae and apical half of middle tibiae white tinged with rosy red, tarsi testaceous. Head without a central sulcation on the vertex, which is a little broader than an eye, antennae a little lorger than body (incl. elytra), first joint as long as width of vertex with one eye, thickest somewhat behind the middle, from this point strongly narrowed toward its base, second joint much more slender than first and twice its length, third distinctly longer than second and considerably shorter than fourth. Pronotum with straight lateral margins, the basal margin in front of mesoscutum deeply sinuate or, rather, bisinuate, the margin being very shortly produced backwards in the middle of the sinuosity. Mesoscutum with a triangular percurrent median impression turning its apex forwards. Scutellum finely wrinkled on each side of the median ridge. Elytra with parallel costal margins, cuneus at least two times longer than broad. Front femora with broadly and slightly rounded superior margin and rectilinear inferior margin; middle femora linear; hind femora reaching somewhat beyond apex of abdomen, gradually incrassated from base to near middle, then above rather strongly subsinuately narrowed, the apical third linear; all tibiae almost bare. Length, 2 3 mm., incl. tegm. 3.6 mm.

Amazonas (Fonteboa). — Mus. Stockholm.

Somewhat resembling V. rubrovittatus Dist. in the colouring of the elytra, but quite distinct from it in its other both structural and colour-characters, as redescribed by Reuter. The rostrum is not visible in the carded type.

Xenocylapus n. gen. — Body elliptical, almost impunctate. Head porrect, slightly exserted, about as long as pronotum, above longitudinally and transversally convex,

conically produced in front of the antennae, eyes large but moderately prominent, seen from above much longer than broad, from the side obliquely suboval, clypeus not separated from front by an impression, almost entirely visible from above, lora 1 not distinctly separated from genae, the long gula horizontal, antennae inserted a little before the eyes, long and slender, first joint linear, about as long as anteocular part of head and somewhat passing its apex, second sublinear, narrower and much longer than first, third still narrower, somewhat longer than second, first joint of rostrum thickened, reaching middle of gula, second joint at the base a little curved and thickened (exact length of rostrum not visible in the carded type). Pronotum scarcely sloping, much broader than long, strongly narrowing from base to apex, laterally margined, the collar well defined, about as broad as first antennal joint, lateral margins almost straight, basal margin broadly and very slightly bisinuate, the large confluent convex calli occupying the greatest part of the disc, leaving only the humeral areas and the narrow basal border free. Mesoscutum posteriorly exposed, with a curved oblique keel on each side. Scutellum equilateral, with a longitudinal median carina. Elytra passing apex of abdomen by less than half the length of the membrane, laterally evenly and moderately rounded, veins of corium and clavus distinct and percurrent, cuneus not distinctly separated from the exocorium, which is a little broader than mesocorium, claval commissure as long as scutellum with the visible part of the mesoscutum, membrane with two cells, exterior cell narrowly elongate, interior cell narrowed toward apex, its interior margin subparallel to apical margin of corium and emitting three or four short veins from its posterior half. Fore femora thicker than the others; tibiae without bristles, slightly narrowing from base to apex, the front pair as long as the femora, middle and hind tibiae longer than femora; first joint of tarsi longer than the two others together, and somewhat thicker.

This genus is one of the forms connecting the divisions Cylaparia and Fulviaria, as understood by Reuter. It has

¹ Most authors, including Reuter, use the plural form ›lorae›, but the singular form is not lora (which signifies a poor wine), but lorum, and the plural form is thus lora. Some authors also use the word pila (ball, or pillar) in the meaning of pilus (hair).

certain characters in common with the paleotropical genera Cylapofulvius Popp. and Rhinocylapidius Popp., but can hardly be said to be allied to either of them and occupies a rather isolated position in the subfamily.

Xenocylapus nervosus n. sp. — Opaque, glabrous. Head testaceous, clypeus, genae and a postocular lateral spot fuscous, interocular space scarcely broader than an eye, antennae fuscous, first joint paler in hue, its basal fourth whitish, second joint about three times longer than first. the piceous rostrum with the first joint barely reaching anterior margin of eyes, base of second joint paler. Prothorax fuscous-black, the collar, lateral ledge, pronotal basal border, acetabular margin and three anteriorly subconfluent vittae on the pronotal calli pale testaceous, the median vitta percurrent, the lateral ones posteriorly abbreviated, prosternal part of the collar a little broader than the pronotal part, the posterior lateral part of the pronotal calli finely transversely rugulose, pronotal basal border with a transverse row of extremely fine darker points. The testaceous mesoscutum with a blck spot on each side outside the whitish sublateral keel. Scutellum testaceous, the paler median keel bordered with black on each side. Meso- and metapleura blackish with pale posterior margins. Corium including veins and apical margin whitish, an oblong antemedian spot to exo-, meso- and endocorium, an oblong postmedian area of exocorium and its cuneal area, posterior half of mesocorium, an oblong subapical spot of endocorium, and a broad claval vitta brown, the dark postmedian areas of exo- and mesocorium enclosing irregular whitish markings, membrane fuscous, the veins, an oblong spot in the interior cell, a loop emitted from this cell, and a fascia beween the loop and the exterior margin whitish. Abdomen fuscous-black, the lateral margins and some transverse spots near middle of venter testaceous. Legs brown, two or three annulations to femora and tibiae whitish. Length, Q 5 mm., incl. tegm. 6 mm.

Amazonas (Fonteboa). — Mus. Stockholm.

Subfam. Heterotominae.

Cyrtotylus n. gen. — Body oblong-ovate, impunctate, depressed above. Head a little sloping, seen from above a little broader than long, acutely produced in front of antennae, seen from before almost as high as broad, from the side somewhat longer than high at base, vertex narrowly margined behind, clypeus separated from frons, compressed, semicircularly prominent, its base lying in the middle of the head's height below the antennal line, lora narrow, separated from the moderately high genae, gula a little oblique, as long as peristomium, eyes moderately large, almost touching pronotal apical margin, seen from above suboval, from the side obliquely reniform, antennae inserted at middle of anterior ocular orbita, slender, first joint sublinear but a little thicker near base than at apex, passing apex of clypeus by more than half its length, second joint much the longest, last two joints combined not quite so long as second and still more slender, fourth slightly shorter than third, rostrum reaching hind coxae, very slender, the somewhat thickened but linear first joint a little passing anterior margin of prosternum, second joint a little longer than first but distinctly shorter than third, fourth as long as first. Pronotum slightly declivous, transversally a little convex, laterally broadly and slightly sinuate and very narrowly margined, twice broader than long and twice broader basally than apically, calli placed very near anterior margin, confluent, laterally reaching the margins, posteriorly not quite reaching middle of disc, which has a low and narrow median keel running from posterior margin of calli to near the base, basal margin in front of the exposed mesoscutum very slightly sinuate. Scutellum almost equilateral. Prosternal xyphus margined except at base where it is convex. Orificia distinct. Elytra passing apex of abdomen by the whole cuneus and by the greatest part of the membrane, much broader than abdomen, laterally evenly and moderately rounded. the veins distinct, the somewhat reflexed, basally narrow embolium slightly and gradually dilated to near apex where it is roundedly much more dilated inwards, claval commissure more than twice the length of scutellum, cuneus placed much behind the level of the claval apex, the distance being about equal to the length of the cuneus, about one-third the length of costal margin of corium, horizontal, not at all deflected, longer than broad, at the outer basal angle provided with a small but distinct cell1, the basal incisure very short, basal margin transverse, paracuneus tapering from the rather narrow base to the apex, outer cell of membrane less than half the length of inner cell, not quite reaching base of cuneus, inner cell not quite reaching the level of the cuneal apex, the cubital vein a little diverging from the almost straight corio-cuneal margin2, the apical angle narrowly rounded, the dividing (radial) vein continued beyond the cells to the exterior margin of the membrane, this additional section of the vein slightly convergent to inner margin of cuneus, forming an obtuse angle with the ordinary section and rendering the membrane tricellulate by the formation of a supernumerary cell behind the ordinary outer cell. Vagina reaching middle of venter. Fore coxae reaching middle of mesosternum; femora increasing in length from first to third pair, fore and middle femora linear, hind femora about reaching apex of abdomen, distinctly incrassated, the apical third narrowing toward apex; tibiae sparingly set with short rigid setae (hind tarsi missing).

Does not seem to be nearly related to any described genus.

Cyrtotylus rubricatus n. sp. — Above pale green, erectly palely pilose, slightly shining, head and pronotum opaque, beneath greenish white, antennal scrobes, an upper lateral dot to clypeus, lora, a vertical line behind eyes, a crescent-shaped basal spot to pronotum reaching its middle, scutellum, a rather broad vitta running from middle of clavus to inner apical angle of corium, and a lateral vitta to propleurae cinnabar-red, paracuneus, outer and inner margins and apex of cuneus, and a dot at basal angles of abdominal segments

¹ This cell is present also in some other genera of the Miridae, but has never been mentioned in the descriptions.

² For the sake of shortness I give the name corio-cuneal margin to

² For the sake of shortness I give the name corio-cuneal margin to the inner apical margin of the corium combined with the interior margin of the cuneus.

purple, membrane (including the ordinary section of the radial vein) a little fuscescent, the whole cubital vein purplish, the additional section of the radial vein and a spot attached to the inner margin of its base fuscous; antennae white, slightly tinted with rosy red, an exterior basal spot and an interoinferior streak to first joint, and apex of first and second joint purple; rostrum and legs whitish, apical half of hind femora and all tibiae and tarsi feebly tinted with fulvous. Head subequal in length to pronotum, vertex (\mathcal{Q}) twice as broad as an eye, antennae as long as body (incl. elytra), first joint a little longer than width of vertex (Ω), second three times longer than first and half as long again as basal width of pronotum, third a little more than half the length of second. Pronotum as long in the middle as its apical width. Elytra 3 1/2 times longer than head and pronotum taken together. Length, Q 2,8 mm., incl. tegm. 4.5 mm.

Peru (Callanga). — Mus. Stockholm.

Subfam. Phylinae.

Pliniella n. gen. - Body oblong, impunctate. Head vertical, considerably broader than apex of pronotum and half its basal width, seen from above about two times broader than long, slightly roundedly produced between the antennae. from before about as high as broad, seen in profile as long as high at the base, vertex a little declivous, well separated from the short but distinct neck and also separated from the frons by a slightly curved impressed line, eves not touching apical margin of pronotum, viewed from above rounded, but with the straight orbitae slightly diverging. seen from the side perpendicular, narrow, slightly emarginate posteriorly, clypeus very narrow, separated from frons by an impression, viewed in profile very slightly roundedly produced, its base placed a little below inferior angles of eyes and much below antennal scrobes, lora very narrow, linear, separated from the genae, which are as high as the vertical diameter of the eyes, facial angle slightly obtuse, gula perpendicular, as long as peristomium, antennae inserted

a little inside anterior orbitae of eyes and a little below their middle, first joint as long as head seen from above, second much longer, rostrum almost reaching apex of hind coxae, very slender, first joint thicker, reaching a little beyond anterior margin of prosternum. Pronotum moderately sloping, very slightly convex, about two times broader than long and 2½ times broader at base than at apex, lateral margins a little rounded, immarginate, subacute, lateral angles rounded, basal margin broadly and not deeply sinuate, calli indistinct. Mesoscutum exposed. Scutellum broader than long. Prosternal xyphus convex at the base, but laterally margined. Orificia distinct. Elytra passing apex of abdomen by the greatest part of the membrane and by the whole cuneus, laterally slightly rounded, veins of corium wanting, claval vein distinct, claval commissure about twice the length of scutellum, embolium through its basal third narrow, linear, then gradually a little widening, at apex inwardly roundly dilated, surface of corium and clavus with semirecumbent hairs arising from minute granules and arranged in three rows on corium and in two rows on clavus, cuneus placed much behind the level of the claval apex, the distance being about equal to the length of the cuneus, about one-fourth the length of costal margin of corium, a little declivous, longer than broad, the basal incisure indistinct, basal margin almost transverse, surface o cuneus sparsely set with hairs similar to those of corium but not arranged in rows, paracuneus wanting, coalesced with corium, outer cell of membrane small, only slightly longer than broad, not nearly reaching base of cuneus, subcoriaceous, of the same consistence as the cuneus. inner cell not quite reaching the level of the cuneal apex, the cubital vein but slightly diverging from the straight corio-cuneal margin, the apical angle rounded, anal vein of membrane thickened in its basal part. Wings without a hamus in the cell. Abdomen much narrower than elvtra. Fore coxae reaching beyond middle of mesosternum; fore and middle femora subequal in length, sublinear, hind femora longer, not quite reaching apex of abdomen, distinctly incrassated, their upper margin broadly rounded, the lower margin straight; tibiae sparingly set with rigid setae which are rather long on the hind pair; tarsi rather long, second

joint of hind tarsi much longer than the others, third longer than first, claws somewhat beyond middle strongly curved, pseudarolia reaching the curvature of the claws, rather broad, entirely connected with the claws, their free inferior margin incrassated, much thicker than the laminate part of the pseudarolia, which is transversely striated.

I am unable to find any described form allied to this genus.

Pliniella sacerdotula n. sp. - Sparingly clothed with long white semirecumbent hairs; white, underneath slightly tinted with greenish-yellow, head with the following black markings: a lateral spot to the neck extended downward in the form of a vertical fascia emitting from its middle a short vitta backward, a median vitta to vertex continued through the frons and clypeus, the narrow transverse impression between vertex and frons, a narrowly triangular spot on each side between this impression and antennal base, a vitta on the juga extended from base of antennae downward and joined to an other vitta extended from the lower angle of the eves through the lora to apex of peristomium, these two vittae forming together a narrowly Y-shaped figure, pronotum. mesoscutum and scutellum velvety black, pronotum in its apical half with two vittae near each other and a percurrent sublateral vitta white, corium with an irregularly triangular, anteriorly sinuate dark fuscous spot at the interor apical angle, membrane dark smoky fuscous, somewhat paler in the interior half and with three rather large hyaline spots, an oblong irregular one at the basal margin, an oblong one at the interior margin, and a round one at apex, the basal byaline spot extended from the exterior basal angle of the membrane to the inmost third of the interior cell, but interrupted by a vitta emitted from the fuscous area to the margin of the cuneus between the two outer thirds of the interior cell, and by a fuscous indentation behind the exterior cell, the incrassated basal part of the anal vein fuscous; antennae white, first joint, apical fourth of second, and apex of third black (fourth lacking); rostrum and legs white. slightly tinted with yellowish. Head a little more than half the length of pronotum, antennae linear, second joint about

three times longer than first and a little longer than width of pronotum, third about half the length of second. Pronotum a little longer in the middle than broad at apex. Elytra about four times longer than head and pronotum together, corium hyaline. Length, Q 2,5 mm., incl. tegm. 3,5 mm.

Peru (Callanga). -- Mus. Stockholm.