# Records of New Guinea Staphylinidae (Coleoptera) in the Hungarian Natural History Museum 

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#### Abstract

New Guinea assigned to the following genera: Stilicopsis (6), Thinocharis (2), Astenus (10), Oedichirus (1), Paederus (1), Anchocerus (3), Heterothops (4), Atanygnathus (1), Euryporus (1), Hesperus (1), Leucitus (1), Xantholinus (1), Leptacinus (1), Thyreocephalus (2), Metolinus (1), Mitomorphus (7), Zyras (1). Where possible, outline drawings of the aedeagi are shown. A large amount of material was taken by Fauvel and had label names but only a few were published; the remainder were only partially studied. Other specimens were taken by Drs. J. Balogh, I. Loksa, H. Ohlmus and J. J. Szent-Ivány. With 39 figures.


In conjunction with the continuing studies of the New Guinea material of Dr. Hornaввоок, I incorporated a number of specimens from the collection of the Hungarian Natural History Museum which also contained specimens examined by Fauvel but not described. Many of these had label names and only a few, as far as I could ascertain, were published. Not all of this material was studied, but more recent captures were more easily incorporated and have added several species to the list of New Guinea Staphylinidae. Types are placed in he Hungarian Natural History Museum, Budapest. I am indebted to Dr. Z. Kaszab for the opportunity of examining this material, and to the Authorities of the British Museum (Nat. Hist.) for facilities for working with their collections.

> Descriptions of new species

## PAEDERINAE

Stilicopsis flava sp. n. (Figs. 1-2)
Larger than S. hornabrooki sp. n. (i.1.), but it can be compared with many species; the only unmistakable difference is in the structure of the aedeagus of the male (Figs. 1-2). The females are extremely difficult to identify.

Yellow, with a few darker markings on the elytra and laterally on some of the tergites. - He a d as broad as long, with rather fine umbilicate reticulation, eyes convex, their longitudinal diameter equal to the length of the temples which bear outstanding bristles. Segments of the antennae longer than broad, last segment longer than penultimate, finely setose. - Pronotum longer than broad (2.5:2), reticulation as head, with rather strong lateral bristles. - Elytra longer than broad (4:2.75), strongly and densely punctured, interstices narrower than diameter of punctures, shining, with short pubescence and a few lateral bristles. - Abdomen very finely and densely punctured, tergites with short robust black apical bristles and longer lateral bristles. - Aedeagus: Figs. 1-2. Length 4.5 mm .

Holoty pe ${ }^{7}$ : Eddy Creek, $2050 \mathrm{~m}, 30$. VIII. 1968. - Paratype $\uparrow$, same data (Dr. J. Balogh).

Stilicopsis rufa FAUV. comb. n. (Fig. 5)
Sunius rufus Fauvel, 1880: Ann. Mus. Genova, 15: 85.
A single example of this species was included in the material. The reticulation of the head is more elongate than in most species and is only faintly umbilicate; segments four to seven of the antennae are as long as broad, eight to ten transverse. The elytra are finely but not densely punctured, the interstices are broader than the diameter of the punctures. Aedeagus: Fig. 5.

## Stilicopsis repens sp. n. (Fig. 6)

Of the size of $S$. unicolor CAM., but differs by the shorter elytra, the more transverse segments of the antennae and the absence of the strong black bristles, especially those of the abdomen and aedeagus (Figs. 3-4).

Reddish yellow, elytra and legs paler. - Head a little broader than long, with a larger network of umbilicate reticulation; eyes moderately convex, their longitudinal diameter equal to the length of the temples which have weak outstanding setae; antennae with the second segment shorter than the first and third, segments four and five slightly longer than broad, six to ten quadrate to transverse, last segment large and bulbous in comparison. - Pronotumabout as broad as long, narrower than the head, umbilicate-reticulate sculpture, but finer than that of the head, with four or six lateral outstanding bristles, slightly converging towards posterior margin. - Elytra as broad as long, finely and densely punctured, parallel-sided, with three or four lateral bristles. Abdomen very sparsely and finely punctured. Aedeagus: Fig. 6. Length 3 mm .

Holoty pe $\sigma^{1}$ : Port Moresby, Brown River, 2. X. 1969.-Paratype + , same locality, 17-18. VIII. 1969 (Dr. J. BALOGH).

Stilicopsis fusca sp. n. (Fig. 7)
This is one of the larger species of those found in New Guinea. Compared with S. persimilis CAM. the antennae segments are longer and narrower, the elytra a little broader and shorter, and the black coloration more extensive, the real difference is in the aedeagus (Fig. 7 and 8).

Reddish-yellow, head, pronotum and elytra with large blackened areas, antennae and legs paler. - He a d broader than long (3.5:3), strongly umbilicate-reticulate, eyes large, convex, their longitudinal diameter a little shorter than the length of temples, antennae with second segment short, as long as the tenth, last segment longer than the penultimate, bulbous, asymmetrically acuminate, the maxillary palpi large with the last segment strongly narrowed at apex and the base. - Pronotum a little longer than broad, reticulation as on the head, with lateral bristles. - Elytra longer than broad (4.5:3.75) strongly punctured, with fine short setae. - Abdomen finely punctured and pubescent paratergites broad. Aedeagus: Fig. 7. Length 6 mm .

Holotype $\mathrm{o}^{\text {t }}$ : Mount Wilhelm, 3900 m , 13-24. IX. 1968 (Dr. J. Balogh).

## Stilicopsis montana sp. n.

This species is about the same size as $S$. marmorata CAM., but the antennae is more robust with segments shorter, the sculpture of the head and pronotum are more strongly defined.

Reddish-yellow with obscure darker markings on the elytra and some laterally on the tergites. Head about as broad as long, umbilicate-punctate, rather large and distinct, eyes convex, their longitudinal diameter two thirds the length of the temples from which arise a few bristles; antennae with all segments from the fourth a little shorter than the previous, penultimate as broad as long, last segment longer than penultimate, bulbous, acuminate.-P r o not uma little longer than broad,


Figs. 1-12. Aedeagi: Stilicopsis flava sp. n. (1-2); S. unicolor CAM. (3-4); S. rufa sp. n. (5); S. repens sp.n. (6) ; S.fusca sp. n. (7); S.persimillis CAM. (8); S. thiensis sp. n. (9-10); Astenus biroi sp.n. (11-12)
umbilicate-punctate as head, a little broader at anterior corners which are rounded, with rather robust lateral bristles, narrower than head and pronotum. - E 1 y tr a longer than broad (5:4) rather coarsely and densely punctured, shining and surface uneven, with short decumbent setae. - A b domen broad, finely punctured and pubescent, paratergites large and distinct. Size 6-6.5 mm.

Holotypeq: Mount Wilhelm, 3900 m, 13-24. IX. 1968. - Paratype, 1 ex., same data (Dr. J. Balogh).

## Stilicopsis reticulata $\mathrm{sp} . \mathrm{n}$.

The shape of the head is similar to $S$. marmorata CAM. (from New Guinea), but the extremely fine reticulation of the head and pronotum and the coarse puncturation of the elytra separate this from all others so far described.

Reddish-yellow, pronotum with lateral posterior two thirds much darkened, shoulders of elytra and posterior margins to the suture with the exception of the lateral corners also darkened, tergites also narrowly laterally darkened. - He a d as long as broad, very densely and very finely reticulate, with two large punctures equidistant between the eyes, and others smaller and irregular, with shallow elongate depressions along the clypeus, broadest at the eyes which are convex, and their longitudinal diameter is a little shorter than the length of the temples, and which strongly converge towards the neck, bristles weak, antennae with all segments longer than broad, the second shorter than the third but both shorter than the first which is more robust, from the fourth segment each a little shorter than
the previous, last segment longer than the penultimate, asymmetrically acuminate, finelly setose. Pronotum a little longer than broad, narrower than head, very densely and very finely reticulate with irregular punctures and other surface irregularities, broadest at anterior third, with rather long lateral bristles. - Elytra longer than broad ( $3.25: 2.75$ ), coarsely, shallowly yet not very densely punctured, with short setae, rather shining, with a few slender lateral bristles. - Abdomen sparingly and finely punctured with a very fine reticulate microsculpture, parallel-sided, with fine setae. Legs sparingly and finely setose more so on tibiae. Length 5.5 mm .

Holotype $q:$ New Caledonia, Nouméa, Thie Forest, 14. X. 1969 (Dr. J. Balogh).

Stilicopsis thiensis sp. n. (Figs. 9-10)

Very different from all other species so far described by the large and indistinct reticulation of the head, not umbilicate, the extremely fine reticulate microsculpture of the pronotum, and the puncturation of the elytra much less dense.

Reddish-yellow, antennae, maxillary palpi and legs paler. - Head as long as broad, moderately shining, reticulation very large and indistinct,impunctate except for a few on the temples with fine setae, eyes convex, a little shorter than the temples, antennae with the first segment rather robust and longer than the others, second segment half the length of the first, third segment longer than the second and more slender, segments four to six shorter but longer than broad, seven to nine a little shorter, ten as long as broad, last segment rather bulbous, with scanty short setae.- Pronotum a little longer than broad, with extremely fine reticulation, with punctures laterally and on anterior margins with rather long bristles, broadest at anterior third, with a narrow elevated median line which does not extend to the margins. - Elytra longer than broad (2.5:2), rather strongly and moderately densely punctured, the interstices broader than the diameter of punctures, rather shining, with short setae, laterally with short bristles. - Abdomen rather shining, with fine setae, without punctures or microsculpture. Legs without setae. Aedeagus: Figs. 9-10. Length 4 mm .

Holotype $\sigma^{*}$ : New Caledonia, Noumea, Thie Forest, 14. X. 1969 (Dr. J. Balogh).

## Thinocharis filiformis sp. n. (FAUVEL i. 1.)

This is one of the smallest species of the genus.
Yellowish-red, the head a little darker, legs and antennae paler. - Head as broad as long, broadest at the distinct posterior corners and narrowing towards the front, moderately shining, with a fine reticulation on the vertex, eyes small, about one-third of the length of the temples; antennae with first two segments enlarged, others filiform, with distinct setae. - Pronotuma little longer than broad, moderately densely punctured except on median line, parallel-sided. - Elytra as broad as pronotum, a little longer than broad, rather roughly and irregularly punctured. - A bdomen finely punctured and pubescent except last tergite, parallel-sided. Legs of normal structure. Length 2 mm .

Holotype: Sattelberg, Huon Golf, III. 1899. - Paratype, 1 ex., same data (Bíró), New Guinea.

## Thinocharis extrema sp. n. (FaUVEL i. 1.)

This species is a little smaller than T. papuanus CaM. and generally lighter in colour, the antennae is more filiform and a little shorter.

Reddish-brown, head and elytra darker, legs and maxillary palpi paler. - He a d broader than long, finely punctured and pubescent, eyes not convex their longitudinal diameter half the length of the temples which are almost parallel to each other, antennae with the first and second segment broader than the rest which is typical of the genus, penultimate two segments shorter than the rest, last segment acuminate, a little longer than penultimate. - Pronot umalmost as broad as long, finely and densely punctured and pubescent, but having a narrow median line impunctate and shin-
ing, almost parallel-sided. - Ely tra as long as broad, moderately shining, a little more strongly punctured than head and pronotum. - A b domen very finely and densely punctured, eighth tergite with rather strong setae. Legs with tarsi shorter than tibiae, with segments also quite short. Length 2.5 mm .

Holotype: Erima, Astrolabe Bay, 1896, New Guinea (Bíró). - Paratypes: 8 ex., same data; 3 ex., also Stephansort, Astrolabe Bay, 1897, 1898; 1 ex., Sattelberg, Huon Golf, 1899; 2 ex., FriedrichWilhelmshafen, 1901 (Bíró).

Astenus biroi sp. n. (FAUVEL i. 1.) (Figs. 11-12)
Comparing this species with A. suturalis Cam. (described from N. W. India), the head is shorter, the antennae longer and the abdomen more finely punctured.

Head, pronotum and abdomen black, pronotum reddish-black, paler towards posterior margin, legs, antennae and mouth-parts pale yellow. - He a d longer than broad, densely reticulateumbilicate, eyes large, moderately convex, their longitudinal diameter a little shorter than the length of the temples which narrow a little to the posterior corners which are rounded, antennae filiform, second segment shorter than others, last segment equal to the length of penultimate segment. Pronotum sculpture reticulate-umbilicate as the head, broadest at anterior third, narrowing. strongly towards the neck.-Elytra a little longer than broad, strongly and densely punctured, with fine short pubescence, shoulders rounded and narrow, bordering round scutellum. - A b d om en finely and densely punctured, finely reticulate, broadest at sixth tergite, paratergites with apical black bristles. Male fifth tergite broadly emarginate, with about twelve black spines or teeth, broadly depressed in front of the emargination, sixth sternite with a triangular excision. Legs with very short setae. Aedeagus: Figs. 11-12. Length 6 mm .

Holotype $\sigma^{\lambda}$ : Sattelberg, Huon-Golf, 1899 (Bíró). - Paratypes: 8 ex., same data; 2 ex., Erima, Astrolabe Bay, 1896 (Bíró).

Astenus cephalus sp. n. (Fauvel i. 1.) (Figs. 13-14)
Smaller than A. biroi sp. n. with finer reticulation of head and pronotum which is not umbilicate, and the antennae are shorter.

Reddish-brown, elytra and abdomen a little darker, the former with a narrow apical border of yellow sometimes extending to the posterior third, legs and antennae pale yellow. - He a d longer than broad (3:2) finely and very densely reticulate, eyes large, moderately convex with facets large, the longitudinal diameter of the eyes equal to the length of the temples and to the anterior part of the head, temples narrowing a little to the posterior corners; antennae filiform, with the second segment the smallest, the last segment equal to the penultimate. - Pronotum a little longer than broad, broadest at anterior third, then contracting strongly to the neck; very finely reticulate. Elytra a little longer than broad, strongly and densely punctured with close short putescence.-A b domen densely and finely punctured and pukescent. The male with a small triangular excision on the sixth sternite, fifth sternite with a broad shallow emargination closely set with about sixteen blunt parallel spines. Aedeagus: Figs. 13-14. Length 4 mm .

Holotype $0^{\prime \prime}$ : Stephansort, Astrolate Bay, 1897. - Paratypes, 1 ex., same locality, 1900; 7 ex., Friedrich-Wilhelmshafen, 1896; 3 ex., Erima, Astrolabe Bay, 1896; 1 ex., Mount-Hansemann, Astrolabe Bay, 1901 (Bíró).

Astenus geniculatus sp. n. (FaUVEL i. 1. ) (Fig. 15)
Compared with $A$. papuanus CAM. (Fig. 16), this species has more elongate reticulation of the head and pronotum, finer, and not asperate puncturation of the elytra and without the broad posterior border of yellow, and with the apex of the femora black, the aedeagus is alsodifferent.

Dark red-brown, the pronotum often lighter, the elytra, and abdomen from the fifth tergite and the apex of femora black, legs otherwise and antennae pale yellow. - Head as broad as long, reticulation linear, eyes moderately convex, their longitudinal diameter equal to the length of the temples but shorter than the post-ocular region, antennae with second segment shortest, last segment longer than the penultimate. - Pronotum longer than broad, narrower than head, reticulation linear, broadest at anterior corners and converging strongly to the neck. - Elytra as broad as long, moderately densely punctured, the interstices about equal to the diameter of the punctures, broader than the pronotum, parallel-sided. - Abdomen broadest at seventh tergite, finely and densely punctured and pubescent, in the male with the last sternite with a small deep excision. Aedeagus: Fig. 15. Length 4 mm .

Holotype $\sigma^{x}$ : Stephansort, Astrolabe Bay, 1897. - Paratype $q$, same data (Bíró).

Astenus baloghi sp. n. (Fig. 17)

This species bears some resemblance to Stilicopsis bicincta Fauv., but the labrum and the elongate head assigns it to Astenus; the head and pronotum are darker, the antennae filiform, the elytra narrower and puncturation more distinct.

Head, pronotum and abdomen black or blackish, elytra reddish-yellow, with a darkened patch laterally in the middle and extending over the reflexed margin; legs and antennae pale yellow. He a d slightly longer than broad, reticulate-umbilicate, eyes convex, their longitudinal diameter equal to the length of the temples, but longer than the fore part, antennae filiform, the last segment a little longer than the penultimate, temples with porrect bristles. - Pronotum as long as broad, reticulate-umbilicate, broadest at anterior third, converging to posterior corners, with lateral bristles. - Ely tra as broad as long, moderately finely but distinctly punctured, with short setae. Abdomen moderately punctured and setose. Aedeagus: Fig. 17. Length 5 mm .

Holotype $\sigma^{\text {t }}$ : Baiyer River Sanctuary, 1-5. IX. 1969 (Dr. J. Balogh).

## Astenus subgrandis sp. n. (Fig. 18)

This species is as large as $A$. kashmiricus CAM. (from Kashmir), the head and pronotum are similar, the elytra are longer, more convex with finer puncturation, without the red markings, also the finer puncturation and pubescence of the abdomen; in these last two respects it differs from A. obscurus CAM. (from India).

Black, antennae and legs yellow. - Head broader than long, rather finely reticulate-umbilicate, eyes large, moderately convex, their longitudinal diameter equal to the length of the temples which have porrect bristles, antennae with segments longer than broad, a little narrower at the base - of each, last segment a little longer than the penultimate. - Pron ot u m longer than broad, retic-ulate-umbilicate, a little coarser than the head, broadest at anterior third, sharply converging to the neck and more gradually to the posterior margin, with lateral bristles. - Ely t r a longer than broad, densely asperately punctured, with short decumbent setae, convex, distinctly narrowing to the posterior margins. - A b do men broader towards the apex, densely punctured, with fine, dense, decumbent setae; in the male with a deep triangular excision. Aedeagus: Fig. 18. Length 6 mm .

Holotype $\sigma^{\text {t }}$ : Port Moresby, Rigo, 18. VIII. 1968 (Dr. I. Loksa).

## Astenus bonus sp. n .

The puncturation of the elytra of this species is similar to that of $A$. serpentarius CAM. (from Sumatra), but the elytra are shorter and the reticulation of the head and pronotum is finer.

Reddish-yellow, elytra paler, antennae and legs pale yellow. - Head as broad as long, reticulate umbilicate, eyes moderately large, facets also large, longitudinal diameter of zyes one third the rtotal length of the head, temples almost straight, posterior corners rounded but distinct; antennae
filiform, last segment longer than the penultimate.-Pro notum a little longer than broad, reticulateumbilicate, broadest at anterior third, narrowing to the "neck", lateral margins straight, converging gradually to the posterior margin, and with outstanding bristles. Elytra almost as broad as long, moderately densely and finely punctured, each with very short bristles, shining, parallel-sided. - Abdomen moderately punctured and pubescent, with black apical bristles. Length 4.5 mm .

Holoty pe $\uparrow$ : Brown River, 40 km N of Port-Moresby, 6-8. IV. 1965 (Dr. J. Balogh and Dr. J. J. Szent-Ivány).

## Astenus regulus sp. n.

Compared with A. frater CAM. (from the Philippines), the reticulation of the head and pronotum is coarser, the head shorter, the antennae longer.

Head, pronotum and abdomen black, elytra black with a reddish triangular patch extending from anterior corners to a third of the suture, antennae, mandibles and legs pale yellow. - He a d a little longer than broad, strongly reticulate-umbilicate, eyes large, convex, their longitudinal diameter longer than the length of the temples, but equal to that of the anterior region; antennae filiform, the second segment shortest, last segment as long as penultimate. - Pr o not um a little longer than broad, reticulate-umbilicate as the head, broadest at anterior third, laterally converging strongly to anterior margin, less so to the posterior margin. - Elytr a about as broad as long, strongly and


Figs. 13-23. Aedeagi: Astenus cephalus sp. n. (13-14); A. geniculatus sp. n. (15); A. papuanus Cam. (16); A. baloghi sp. n. (17); A. subgrandis $\mathrm{sp} . \mathrm{n} .(18) ;$ A. rigoensis $\mathrm{sp} . \mathrm{n}$. (19); Oedichirus montanus sp. n. (20-21); O. magnus sp. n. (22-23)
densely punctured, interstices narrower than diameter of the punctures, with short black lateral bristles; parallel-sided, moderately shining. - Abdomen moderately densely punctured and pubescent. Legs with scanty short black bristles, more so on the femora. Length 5 mm . Holotype $\uparrow:$ Port Moresby, Rigo, 18. VIII. 1968 (Dr. I. Loksa).

## Astenus simulator sp. n .

This species differs from A. rigoensis sp. n. only in the following details: the pronotum and elytra are shorter, the puncturation of the latter is not quite so dense and a little larger, the black blotch is much smaller and does not extend so closely to the suture; they are more parallel-sided, the abdomen is broader with evident black bristles from the apical margins of the tergites.

Reddish-yellow, elytra, legs and antennae paler, blotches on elytra and basal half seventh tergite black or dark. - H e a d as broad as long, reticulate-umbilicate, eyes convex, their longitudinal diameter equal to the length of the anterior region and the temples; antennae with segments elongate. - Pronotum longer than broad, reticulate-umbilicate, broadest at anterior third, with lateral bristles. - Elytra a little longer than broad, moderately densely punctured and pubescent, shining, with a few short black bristles at "shoulders". - A b d o m en rather sparingly punctured arranged to form two transverse ridges with apical black bristles, broadest at sixth and seventh tergites. Length 4 mm .

Holotype ? : Port Moresby, Rigo, 18. VIII. 1968 (Dr. I. LoksA).

Astenus rigoensis sp. n. (Fig. 19)
Compared with A. maculipennis Kr. (from India and Sumatra), this species is smaller and the elytra are more strongly punctured.

Head and pronotum, and third to sixth tergites reddish, seventh black, also the eigth, elytra yellow with a large black blotch on each reaching almost to the suture, antennae and legs pale yellow. - Head a little broader than long, finely reticulate-umbilicate, eyes convex, their longitudinal diameter equal to the length of the anterior region, but a little longer than the temples which have a few porrect bristles; eyes with facets large. - Pronotum longer than broad, finely reticulateumbilicate as the head, with four or five strong lateral black bristles; broadest at anterior third then strongly narrowing forming the rounded anterior margin, laterally contracting to the posterior margin with corners broadly rounded. - Elytra longer than broad (2.5:2) at shoulders, narrowing a little to the anterior corners, with margins shortening to the suture, finely and densely punctured and with short decumbent pubescence.-A bdomen finely punctured and pubescent, broadest at seventh tergite. Aedeagus: Fig. 19. Length 4 mm .

Holotype $\sigma^{x}$ : Port Moresby, Rigo, 18. VIII. 1968 (Dr. I. Loksa).

## Astenus striatus sp. n.

This species compared with $A$. montanellus CAM. (from the Philippines) is a little smaller, the elytra are shorter and the puncturation larger, the antennae are more moniliform.

Dark brown to black, the legs, antennae and mouth-parts reddish-yellow. - Head as long as broad, with umbilicate puncturation which becomes elongate towards the posterior third, eyes rather small, convex, with large facets, their diameter half the length of the temples viewedfrom above, temples with fine porrect setae; antennae moniliform, the first segment more robust, the second shorter than the first and third, segments from the fourth to the tenth a little shorter than the previous, but all longer than broad, last segment acuminate. - Pronotum longer than broad, broadest at anterior third then sharply converging to the neck, with close rugae in which are small punctures, with slender lateral setae. - Elytra shorter than pronotum, as long as broad, very strongly and closely punctured (aedeagus not figured).- Abdomen shining, strongly and rather densely punc-
tured, finer on the seventh tergite which is broader than those previous, with short setae. Legs almost completely glabrous. Length 5 mm .

Holoty pe $\sigma^{1}$ : Wau, Mt. Kaindi, $2300 \mathrm{~m}, 25$. VIII. 1968. - Paratype $q$ : Wau, Mt. Kumbak, 27-28. IX. 1968 (Dr. J. Balogh).

Oedichirus montanus sp. n. (Figs. 20-21)

This species is of about the size of $O$. biroi sp. n., but differs in having much stronger puncturation of the head, pronotum and elytra, the segments of the antennae are also shorter, the apex of all the femora are fuscous.

Head, pronotum and abdomen black, antennae fuscous except the first segment which is brigh yellow, legs pale-yellow with apex of all femora fuscous. - Head broader than long (3.25:2), very shining, strongly and moderately punctured, without microsculpture, eyes convex, their longitudinal diameter a little longer than the temples; antennae with all segments longer than broad, segments three to nine of about the same length, segment ten a little shorter and more dilated at the apex, last segment a little shorter than penultimate, acuminate with the usual apical spine; maxillary palpi typical. - Pr o n o t u m longer than broad ( $4: 3.25$ ), shining, very strongly punctured, the punctures forming irregular rows and laterally almost confluent, broadest at anterior rounded corners, converging to the posterior margin. - Elytr a a little broader than long, very strongly punctured, shining, broadest at posterior third, broader at anterior border than in biroi. - A b d o m e n parallelsided, strongly punctured as that of the elytra, very shining without microsculpture. Legs of typical structure. Aedeagus: Figs. 20-21. Length 6.5 mm .

Holotype $\sigma^{1}$ : Wau, Mt. Kaindi, 900 m, 27. VIII. 1968. - Paratype ${ }^{7}$, same data, New Gui nea, NE. (Dr. I. Loksa).

Oedichirus magnus sp. n. (Figs. 22-23)

This is the largest species of the genus so far described from New Guinea. It differs from O. papuanus CAM., by the puncturation, especially that of the pronotum and in the completely black colour, excepting legs, antennae and maxillary palpi which are yellow.

Head transverse (5:3.5), shining, sparingly punctured, without microsculpture, eyes con vex, their longitudinal diameter equal to the length of the temples, which gently contract to the broad neck; antennae filiform, all segments longer than broad, the last three shorter than the others, last segment considerably broader at apex and with a sharp spike; last segment of maxillary palpi large, securiform and channelled for its length on the outer surface. - Pronotum longer than broad (6.25:5), broadest at anterior corners which continue into the anterior margin, laterally curving into the narrower posterior margin, shining, with scattered puncturation, and two rows of about nine punctures leaving an impunctate area between, and with a lateral row of setiferous punctures. The pronotum is more convex than in most known species and is similar to those found in the Paederus genus.-Elytr a a little broader than long, anterior margin narrow, broadest at posterior third, very shining, with a row of four large punctures bordering suture, and another row of five large punctures from the humeral corners, convex, posterior margins concave. - A b domen parallel-sided, moderately punctured, denser on base of tergites where there is a distinct alutaceous microsculpture, with conspicuous yellow setae, with the typical two strong spines. Legs long, tarsi dilated, especially the anterior pair, posterior tibiae broadened and diagonal at apex where there is closely set spines and longer setae. Aedeagus: Figs. 22-23. Length 10 mm .

Holotype $O^{\text {x }}$ Mt. Wilhelm, Kambugo-mambuno, 17. IX. 1968, New Guinea NE. (Dr. I. Loksa).

Oedichirus loksai sp. n. (Fig. 24)

This specimen is a little smaller than $O$. sodalis sp . n. (i.1.); it differs by having fewer punctures on the head, especially on the posterior third, the much stronger puncturation of the pronotum, the more rounded anterior corners and more strongly punctured and shorter elytra; the tergites are also more strongly and densely punctured.

Black, antennae, labial palpi and legs pale yellow. - Hea d transverse (2.5:1.75), shining, with large punctures, mostly on the anterior half, eyes convex but not so much as in sodalis, temples very much smaller, antennae with segments shorter than most other New Guinea species, last three segments shorter and more rounded, last segment with apical spine. - Pronot uma little longer than broad, very strongly punctured (inclining to be confluent), very shining, without microsculpture, anterior corners rounded, laterally converging to the posterior margin. - Ely tra shorter than the pronotum, a little broader than long, strongly punctured, shining. - A b d o m e n parallelsided, shining, very strongly punctured, with scanty setae. Legs typical of the genus. Aedeagus: Fig. 24. Length 5 mm .

Holotype $\sigma^{\top}$ : Port Moresby, Rigo, 18. VIII. 1968, New Guinea, SE. (Dr. I. Loksa).

Oedichirus biroi sp. n. (Fauvel i. 1.) (Figs. 25-26)
This species is a little larger than $O$. sodalis $\mathrm{sp} . \mathrm{n}$. (i.1.) and more robust, the puncturation of pronotum is denser and partly striate-punctate, the aedeagus is also different (Figs. 25-26).

Black, mandibles, maxillary palpi, antennae and legs pale yellow. - H e a d transverse (3.25:2), shining, coarsely punctured without microsculpture, eyes rather strongly convex, their longitudinal diameter a little longer than the temples; antennae slender, all segments longer than broad, decreasing in length from the seventh segment, last segment the shortest with an apical spine; third segment of maxillary palpi strongly dilated at the apex, fourth segment securiform. - Pronotum distinctly longer than broad, the anterior corners rounded into the anterior margin; broadest in front, narrowing to the posterior margin, convex; strongly punctured, those in the centre inclining to be striate; shining, without microsculpture. - E 1 y tr a as long as broad, broadest in the middle, strongly narrowed to the anterior margin, slightly narrowed from middle to posterior margin; very strongly punctured, without microsculpture. - Abdomen parallel-sided, without paratergites, very strongly punctured, shining, without microsculpture; apex with two strong spines. Legs with typical explanate tarsi, especially the anterior pair. Aedeagus: Figs. 25-26. Length $5.5-6 \mathrm{~mm}$.

Holotype $\sigma^{1}$ : Sattelberg, Huon Golf, III. 1899. - Paratypes: 6 ex., same data, 2 ex.: Friedrich Wilhelmshafen, 1901 (Bíró).

Oedichirus baloghi sp. n. (Figs. 27-28)
This species is a little smaller than $O$. lucidus sp.n. (i.1.), but differs in the abdomen having a much denser and coarser puncturation, the head with fewer punctures and a different arrangement of punctures on the pronotum.

Head and abdomen black, elytra black with reddish-yellow reflexed margins, legs, antennae and maxillary palpi pale yellow. - He a d transverse (5:3), moderately shining, irregularly and sparingly punctured, eyes very convex, their longitudinal diameter equal to the length of the temples; antennae filiform, second segment shorter than the first and third, segments eight to ten shorter, last segment shorter than the penultimate, acuminate with a sharp spine. - Pronotum longer than broad ( $6: 4.25$ ), shining, without microsculpture, broadest just behind the rounded anterior corners, laterally converging to the posterior margin, with punctures in irregular large depressions. - Elytra a little broader than long, shining, without microsculpture, with large impressions diagonally towards the suture which is bordered with four or five large punctures; rounded from the narrow shoulders to the broader posterior margins. - A b d o m e n parallel-sided, tergites completely covered with large dense circular punctures, the interstices mostly narrower than the diameter of the punctures. Legs typical of the genus. Aedeagus: Figs. 27-28. Length 9 mm .

Holotype $\sigma^{\text {a }}$ : Wau, Mt. Kaindi, 24-25. VIII. 1968, New Guinea NE (Dr. J. Balogh).


Figs. 24-30. Aedeagi: Oedichirus loksai sp. n. (24); O. biroi sp. n. (25-26); O. baloghi sp. n. (2728); O. oundaensis sp. n. (29); Paederus bonus sp. n. (30)

Oedichirus oundaensis sp. n. (Fig. 29)
This species is of the same size as $O$. baloghi sp. n., but differs by the densely punctured pronotum and finely and densely punctured abdomen.

Head dark reddish-black, pronotum a little lighter, elytra reddish-yellow, abdomen dark red-dish-black; legs, antennae and maxillary palpi pale yellow.-He a d twice as broad as long, shining, sparsely punctured, eyes large, convex, their longitudinal diameter scarcely longer than the length of the temples; antennae filiform, segment eight to ten gradually shorter, last segment with an apical spine. - Pronotum larger than broad (5:4), strongly, densely punctured, a few weak setae, broadest at rounded anterior corners, laterally converging to the posterior margins. - Elytra about as long as broad, very strongly punctured, interstices narrower than the diameter of the punctures, laterally rounded to the posterior margins, shorter at the suture. - Ab domen parallel-sided, tergites finely and densely punctured, with fine setae, with two strong spines at the apex. Legs typical. Aedeagus: Fig. 29. Length $8-9 \mathrm{~mm}$.

Holoty pe $O^{*}$ : New Caledonia, Ponerihouén Mt. Ounda, 700 m, 11. X. 1969 (Dr. J. Balogh).

Paederus bonus sp. n. (Fig. 30)
This species is larger than $P$. kaindiensis sp. n. (i. 1.), the head and pronotum are also very much more strongly punctured, with distinct microsculpture on the former. The aedeagus also differs. It differs from $P$. michaelensis Last by the same distinctions and by coarser puncturation of the elytra.

Completely black, except legs and antennae which are reddish. - He a d a little broader than long ( $9: 7.25$ ) shining, very strongly and irregularly punctured, more so on temples where are dense outstanding bristles, less densely punctured on clypeus, with transverse microsculpture; eyes moderately convex, their longitudinal diameter almost half the length of the temples; antennae with all segments longer than broad, segment two much shorter than the first, third segment longer than the first, last segment longer than the penultimate and acuminate, all segments with rather long bristles. - Pronotuma little longer than broad (9.5:8), shining, very coarsely punctured, but leaving an impunctate elongate median band, with moderately dense porrect bristles, broadest at anterior third, convex. - Elytra longer than broad (8.75:5) at shoulders, as long as broad at posterior margins, very coarsely and asperately punctured with long slender bristles interspersed with erect longer bristles, without microsculpture, shoulders not very distinct. - Abdomen shining, with much finer puncturation than elytra, not dense, with short bristles and a fine alutaceous microsculpture. Legs with rather dense slender bristles. Aedeagus: Fig. 30. Length 18 mm .

Holotype $\pi^{*}$ : New Caledonia, Ponerihouén, 10-12. X. 1969 (Dr. J. Balogh).

## Anchocerus wilhelmensis sp. n. (Fig. 31)

This species differs from A. birmanus Fauv. (from the Malay Peninsula) by having the elytra shorter than the pronotum, the more transverse rectangular head with the temples more parallel-sided, also by the more dense puncturation of the elytra and pronotum; it also differs from A. monticola Cam. (from India) by the shorter and more coarsely punctured elytra.

Black, except legs and palpi which are reddish, base of antennae also rufous. - He a d transverse (4.75:3.25), shining, very densely and finely punctured, eyes small, not convex, their longitudinal diameter one third of the length of the temples which are almost parallel-sided, with a few porrect bristles, in addition to the fine puncturation there are two large punctures near together towards the anterior margin and before the posterior margin four larger punctures placed obliquely; antennae geniculate, the third segment shorter than the second, segments four to seven a little longer than broad, eight to ten a little transverse, segment eleven truncate, not longer than the penultimate. - Pronotum about as broad as long, shining, with very fine puncturation as on head, with four much larger punctures quadrately placed on the vertex; broadest just behind the middle, with lateral fine bristles, very convex. - Elytra broader than long (7:4.75), shorter than the pronotum, rather coarsely asperately punctured but not densely, with short decumbent setae, a little shining, suture bordering scutellum large, sparingly punctured. - Abdomen evenly but not densely punctured, with short setae and an extremely fine microsculpture. Legs with tibiae spinose. Aedeagus: Fig. 31. Length $11-13 \mathrm{~mm}$.

Holoty pe ${ }^{\text {º }}$ : Mount Wilhelm, Field Stat., 3200 m , 14. IX. 1968 (Dr. I. Loksa). - Paratype $\%$ : Mount Wilhelm, Kambugomambuno, 17. IX. 1968 (Dr. I. Loksa).

## Anchocerus similis sp. n.

This species is rati $\sim$ r smaller than $A$. wilhelmensis sp . n ., the head is not so transverse and the puncturation of this and the pronotum are much less dense, the puncturation of the elytra is denser and not asperate, the elytra are as long as the pronotum, they are shorter in $A$. wilhelmensis; the puncturation of the abdomen is elongate, punctures open at posterior end.

Black, except legs and last few segment of the antennae which are paler or fuscous. - He a d a little longer than broad, shining, finely irregularly but not densely punctured, with the same arrangement of the larger punctures as in A. wilhelmensis; eyes small, not convex, their longitudinal diameter about one-third the length of the temples, which are nearly parallel-sided; antennae with all segments except the penultimate three longer than broad, last segment finely acicular. - Prono$\mathrm{t} u \mathrm{~m}$ broader than long (6.5:5.25), shining, very finely and sparingly punctured, but this varies to some degree; with two very large punctures on the disc and a further two on the anterior margin, very convex, broadest at posterior quarter, rounded with posterior margin, corners absent, with lateral bristles. - Elytr a as broad as long, as long as pronotum, parallel-sided, moderately densely punctured, interstices a little wider than diameter of punctures which are inclined to be finely umbilicate; moderately shining without microsculpture, with decumbent setae. - Scutellum strongly punctured, much more so than in wilhelmensis. - A b domen densely but shallowly punctured; these are elongate and appear as an arrow-head marking, with fairly dense setae. Legs, especially anterior and intermediate tibiae spinose. Length 10 mm .

Holotype $\mathrm{Q}:$ Friedrich Wilhelmshafen, VI.-VII. 1901 (Bíró) - Paratype $q:$ Sattelberg, Huon Golf, 1899 (Bf́ró).

## Anchocerus punctus sp. n.

This species is smaller than either A. wilhelmensis $\mathrm{sp} . \mathrm{n}$. and A. similis $\mathrm{sp} . \mathrm{n}$. ; it is similar to the former in the puncturation of the head and pronotum, but it is denser and the punctures are in the form of minute scratches, the elytra are also shorter than the pronotum, the scutellum is strongly and coarsely punctured; the puncturation of the abdomen is more like that of similis, but it is much denser, the punctures deeper and elongate with ends open posteriorly.

Black, except legs and antennae which are fuscous.- He a d almost as long as broad, shining, moderately densely but irregularly and finely punctured, the punctures appearing as minute elongate scratches or cuts, anterior punctures larger and with four obliquely from posterior margin. Eyes small, not convex, their longitudinal diameter shorter than three times the length of the temples which broaden a little towards the posterior corners, antennae with penultimate four segments transverse, the last narrower, but rounded at the apex. - Pronotum a little broader than long, broadest at posterior third, shining, densely and very finely punctured, the punctures forming short scratches or cuts; two very large punctures on disc, strongly convex, with lateral setae. - Ely t$r$ a broader than long $(5.75: 3.75)$ shorter and narrower than the pronotum, parallel-sided, more densely punctured than in A. wilhelmensis, but less densely than in A. similis, with short decumbent setae and a confused almost imperceptible microsculpture. - Scutellum with punctures equal in size to those of the elytra. - A b d o m e n with very dense elongate deep punctures open at posterior end, those on third tergite more circular. Legs with anterior and intermediate tibiae spinose. Length 10 mm .

Holotype $\circ$ : Wau, Mount Kumbak, 27-28. IX. 1968 (Dr. J. Balogh).

Heterothops fundatus sp. n. (Fig. 32)

Similar to $H$. saltus Last, but larger and the elytra is more densely punctured, and the head and pronotum have a fine microsculpture which is lacking in H. saltus.

Head and pronotum black, elytra, abdomen, legs and antennae rufous, elytra and legs paler, base of tergites darker. - Head as broad as long, a few punctures towards the posterior margin and on the temples, also one at the inner margin of the eyes, all with rather long slender bristles, with a very fine alutaceous microsculpture, eyes small, not convex, their longitudinal diameter about onethird of the length of the temples which are only weakly rounded: antennae with all segments longer than broad, segments six to ten shorter but about equal in length. - Pronotuma little broader than long, broadest at posterior corners which are broadly rounded, narrowing to anterior margin, convex, with the usual two pairs of dorsal punctures, the posterior pair larger, also others laterally with slender bristles, with distinct alutaceous microsculpture. - El y tr a broader than long (4.25:3)
shorter than the pronotum, moderately densely and asperately punctured, with short setae, without microsculpture sinuate at postero-external corners, shorter at the suture. - Scutellum large, with puncturation and microsculpture. - A b domen broad, narrowing gradually to apex, weakly and not densely punctured, without microsculpture, posterior margins of tergites with slender bristles, but those from the paratergites much stronger. Legs spinose, especially the intermediate tibiae. Aedeagus: Fig. 32. Length 6 mm .

Holotypeo ${ }^{1}$ : Mt. Wilhelm, 3900 m, 13-24. IX. 1968 (Dr. J. Balogh).

Heterothops rufulus sp. n. (Fig. 33)

This species bears a resemblance to the following $H$. fundatus sp. n., H. rubicundulus sp. n., and H. saltus LAST, as it has the elytra shorter than the pronotum; it differs from them all in being entirely reddish-yellow. It has the antennae shorter and more robust than $H$. saltus the elytra less densely punctured and the aedeagus quite different from $H$. fundatus, antennae with shorter segments and shorter elytra than H. rubicundulus.

Reddish-yellow throughout. - Head as long as broad, shining, without microsculpture, with one or two rather large punctures on the inner margins of the eyes and the temples each with slender bristles, eyes small, not convex, their longitudinal diameter about one third of the length of the temples which are weakly rounded. - Pronotum a little broader than long, moderately shining, with extremely fine microsculpture, with the two dorsal rows of two punctures, with several fine lateral punctures, with fine bristles curling towards the posterior and others towards the anterior corners, convex, posterior corners rounded. - Elytra shorter than the pronotum, transverse (4:2.5), moderately densely asperately punctured and pubescent, interstices shining, sinuate at posteroexternal corners, a row of short black bristles along posterior margins; suture short. - Scutel1 um sparingly punctured and pubescent. - Abdomen sparingly punctured, tergites with apical rows of slender bristles; with longer bristles at apex of paratergites. Legs spinose. Aedeagus: Fig. 33. Length 5 mm .

Holoty pe $O^{\text {tr }}$ : Mount Wilhelm, Field Station, 20. IX. 1968 (Dr. I. Loksa).

## Heterothops rubicundulus sp. n.

This species is smaller than $H$. primarius Last, the head is longer, the eyes are smaller, the colour of the head and pronotum is reddish-yellow, the elytra and scutellum black, in primarius the head and pronotumare black and the elytra red.

Colours as above, but antennae and abdomen dark rufous, legs reddish-yellow. - He a d a little longer than broad, impunctate with the exception of a row of five or six along the posterior margin, each with black bristles, and a single puncture on the inner margin of the eyes, with an extremely fine microsculpture, eyes not all convex, their longitudinal diameter less than half the length of the temples which are almost parallel with each other; antennae with the third segment a little shorter than the second, all segments longer than broad and almost parallel-sided, last segment longer than the penultimate, acuminate, labrum with rather long bristles. - Pronotum broader than long (4:3), broadest at anterior corners which are rounded, convex; with typical two punctures on either side of the median area, the first two very close to the anterior margin, a few lateral punctures with moderately long bristles, surface with a very fine alutaceous microsculpture. - Elytra broader than long ( $4.25: 3$ ), a little shorter than the pronotum, asperately but not densely punctured, with decumbent short setae, shining, without microsculpture, broadest at posterior margin which is sinuate at the corners, and curved to the short suture. - Abdomen broad and rather flat, tergites with apical bristles, narrowing a little to the apex. Legs with tibiae spinose especially the intermediate pair. Length 6 mm .

Holotype 우 (unique): Mt. Wilhelm, Keglsugl, 10-14. VII. 1969 (Dr. J. Balogh).

## Heterothops simulator sp. n. (Fig. 34)

This species is rather smaller than $H$. primarius Last and is black, the aedeagus also differs with the apex of the median lobe being more strongly acuminate. From H. kassemensis $\mathrm{sp} . \mathrm{n}$. it differs in having more robust antennae with basal segments different in structure and colour; the aedeagus is also quite different.

Completely black, except legs which are fuscous, base of antennae brownish and also the abdomen. - He a d elongate ovate, impunctate except for a few punctures on the inner margins of the eyes and on the temples, without microsculpture, eyes small, not convex, longitudinal diameter one third of the length of the temples which are weakly rounded; antennae with all segments distinctly much longer than broad, segments two and three narrowed at the base, four to ten much less so, almost parallel-sided, last segment equal in length to the penultimate, asymmetrically acuminate. Pronotum broader than long ( $5: 3.75$ ), with extremely fine microsculpture, with four dorsal punctures and others laterally, convex, posterior corners rounded. - Ely tr a shorter than pronotum, broader than long, moderately densely asperately punctured, with short setae, without microsculpture, postero-external corners sinuate, suture shorter than lateral margins. - Scutellum sparingly finely punctured, with fine microsculpture.-Abdomen shining, tergites with a central


Figs. 31-39. Aedeagi: Anchocerus wilhelmensis sp. n. (31); Heterothops fundatus sp. n. (32); H. rufulus sp. n. (33); H. simulator sp. n. (34); Atanygnathus pallidus sp. n. (35); Euryporus multicavus sp . n. (36); Hesperus kaindiensis sp. n. (37); Leucilus biroi sp. n. (38); Zyras (Zyras) biroi var. subflavus var. n. (39)
and an apical row of punctures, the latter with longer bristles; gradually narrowing to the apex. Legs with tibiae spinose. Aedeagus: Fig. 34. Length 6 mm .

Holotype $\sigma^{\pi}$ : Mount Wilhelm, 4. IX. 1969 (Dr. J. Balogh). - Paratype $\sigma^{*}$ : Mount Wilthelm, Imbuka Ridge, 18. IX. 1968 (Dr. I. Loksa).

Atanygnathus pallidus sp. n. (Fig. 35)
This species is smaller than $A$. ornatus CAM., from which it can also be separated by the straw-colour of the whole insect except the basal half of the tergites (again except the seventh and eigth which are completely straw-coloured), and fine puncturation of the elytra.

H e a d broader than long (1.75:1.25), moderately shining without microsculpture, eyes small, situated in the middle of the lateral margin with the anterior part and temples of equal length, with one or two setae, antennae with all segments longer than broad except the tenth which is as broad as long, last segment missing, maxillary palpi typical of the genus. - Pronotumbroader than long (3:2), moderately shining, with two pairs of small punctures, the first situated on the anterior margin, each with a short black setae, opposite scutellum with two shallow depressions, moderately convex, broadest at posterior corners. - Ely t r a broader than long (3:2.25), a little broader at posterior margins, finely and densely punctured with fine decumbent pubescence, and three outstanding lateral bristles on either side, distinctly sinuate at postero-external corners. - Scutellum densely punctured and pubescent. - A b d o m e n moderately densely punctured, with longer bristles, narrowing to the apex. Anterior and intermediate tibiae spinose. Aedeagus: Fig. 35. Length 3-5 mm.

Holotype ${ }^{\text {T: }}$ : Kiunga, 23. VII.-2. VIII. 1969 (Dr. J. Balogh).

Euryporus multicavus sp. n. (Fig. 36)
This is a brightly coloured species which can on this account be compared with E. coloratus sp . n. (i.1.). The coloration differs as follows, a dull red as opposed to bright shining red, the elytra dull blue as opposed to shining green, the sixth tergite not red, the legs red not black as in E. coloratus. The eyes are larger, head more finely punctured, the pronotum is covered with extremely fine punctures and lacks the large irregular row as in E. coloratus; the elytra are more densely punctured and less shining, the tergites are more strongly punctured, especially at the base and the punctures are elongate.

Head antennae (except the last two or three segments which are white) scutellum and abdomen black; pronotum dull red, elytra dark blue or greenish-blue, legs red. - Head transverse (3:2), shining, without microsculpture, finely and sparingly punctured, more strongly near inner margins of the eyes, with fine setae and long lateral bristles; eyes moderately convex, their longitudinal diameter twice the length of the temples, posterior corners rounded but distinct; second segment of the antennae half the length of the first, third segment longer than the second but a little shorter than the first, segments seven to eight longer than broad, nine and ten quadrate, last segment longer than the penultimate, all segments setose. - Pronotumalittle longer than broad (6.5:5.75), moderately shining, without microsculpture, with very fine scattered puncturation leaving an undefined longitudinal median area impunctate, with fine inwardly directed setae and long lateral bristles; moderately convex, narrowing a little to the posterior corners which are rounded with the posterior margin, anterior margin narrowing to a broad neck. - Ely tra as broad as long, broader at posterior margins, strongly punctured and pubescent, broader than pronotum, suture broadly bordered. - Scu te 1 lu m finely punctured and pubescent. - Abdomen very shining, with strong elongate openended punctures and on the base of the tergites, especially on the fifth and sixth tergites where they almost form deep sulci and extend over the whole tergite, the sixth tergite of the male with a long keel, the corresponding sternite centrally emarginate. Legs setose, moderately spinose. Aedeagus: Fig. 36. Length $9-10 \mathrm{~mm}$.

Holotype $\mathbb{O}^{\pi}$ : Kiunga, 1. VIII. 1969. - Paratype $\sigma^{\star}$, the same locality, 23. VII.-2. VIII. 1969 (Dr. J. BALOGH).

Hesperus kaindiensis sp. n. (Fig. 37)
Compared with H. multipunctus sp. n. (i.1.) (from New Hebrides), it differs by lacking microsculpture on the pronotum, and with fewer punctures; compared with H. modulatus Last (New Guinea) it differs by the shorter antennae, broader head, much stronger puncturation of the head and elytra, and especially the very long bristles of the whole insect, which are longest on the intermediate tibiae, they easily break and also become very mixed. The aedeagus also is different.

Black except the last three segments of the antennae which are cream-coloured and the elytra which are shining green. - He a d transverse (10:7.5), moderately shining with transverse microsculpture, and large irregular umbilicate punctures near inner margins of the eyes and on temples, broadly but shallowly depressed towards front between the antennae; eyes not convex, their longitudinal diameter half the length of the temples; antennae with segments one to eight longer than broad but becoming shorter to the ninth and tenth which are as long as broad, last segment asymmetrically acuminate, basal segments with long bristles. - Pronotum nearly as broad as long, shining, without microsculpture, with two rows of five irregularly placed punctures, with others laterally bearing long dense outstanding bristles; moderately convex, more so at anterior margin, narrower at posterior margin. - El y r a about as broad as long, very shining, without microsculpture, strongly but not densely punctured, with dense very long bristles. - Scute 11 u m large, finely punctured, with fine microsculpture. - Abdomen with tergites strongly punctured for basal third, with long bristles; narrowing towards the apex. Legs strongly spinose, with very long bristles from the tibiae. Aedeagus: Fig. 37. Length $16,0 \mathrm{~mm}$.

Holotype $\sigma^{\text {( }}$ (unique): Wau, Mt. Kaindi, 2000 m , 27. VIII. 1968 (Dr. I. Loksa).

Leucitus biroi sp. n. (Fig. 38)
From my description of L. paradiseus FaUv., this species differs by having the basal three segments of the antennae dark (not red) and also the colouration of the elytra; the elytral epipleura are black (not reddish-yellow), the apical margins of all tergites are black and there is an absence of the silver-coloured abdominal pubescence present in most other species of the genus.

Head and pronotum black with a dark greenish hue, elytra blackish-purple, with humeral corners and posterior margin green; abdomen black, antennae black except last three segments which are creamy-white; legs pale yellow, tarsi much darker; mandibles and maxillary palpi red. - He a d transverse ( $8.75: 5$ ) irregularly but not densely punctured, towards base and temples punctures larger and some umbilicate, with two distinctive punctures a little beyond the vertex, without microsculpture; eyes not very convex about a third longer than the temples which are rounded to a broad shining and impunctate "neck"; antennae with second segment shorter than the first and third, segments four to seven each a little shorter than the previous, segments eight to ten as long as broad, last segment almost as long as the two penultimate together, segments with bristles.-Pronotumas long as broad, without microsculpture, with two rows of four large punctures, and a few scattered punctures of much smaller size, anterior corners distinct, posterior corners rounded, with bristles at the humeral corners and on lateral margins. - Elytra as long as broad, strongly and densely punctured, interstices about as broad as the diameter of the puncture, shining, without microsculpture, with decumbent setae, more so on lateral margins, suture broadly raised. - Scutellum more finely punctured and pubescent. - Abdomen shining, without microsculpture, basal third of tergites with large open-ended punctures becoming more elongate to the seventh tergite which is completely covered with punctures. Legs with strong spines, first segment equal in length to the three following together. Aedeagus: Fig. 38. Length 11 mm .

Holotype $\mathrm{O}^{\pi}$ (unique): Sattelberg, Huon Golf, 1-15. V. 1899 (Bíró).

## Xantholinus wilhelmensis sp. n.

This is one of the largest species of the genus so far recorded from New Guinea. It is of about the size of the European $X$. glabratus Grav., but with rounded temples similar to those of $X$. tricolor F .

Black, except legs and maxillary palpi which are red. - Hea d longer than broad (8.75:7), broadest at middle, moderately shining without microsculpture; sparingly and irregularly punctured, with weak lateral setae; eyes not convex, small, less than one-fifth the length of the temples, frontal sulci not deep and converging considerably; antennae robust, strongly geniculate, second and third segments longer than broad, four to ten transverse, last segment longer than the penultimate, acuminate. - Pron ot u m longer than broad (9:6.75), moderately shining, with a distinct broken transverse microsculpture, an irregular elongate row of punctures, leaving a median impunctate area, further sparse punctures laterally; broadest near anterior corners where the margin strongly converges to the neck; narrowing and weakly sinuate at posterior third where the corners are rounded; there is a row of equidistant lateral setae; it is convex, especially so at the anterior area. - Elytra shorter than the pronotum, as broad as long, shining, with large sparsely placed punctures each bearing a short seta, the interstices with confused microsculpture, also with lateral bristles. - Scutel1 um large, with transverse microsculpture and two punctures. - Abdomen moderately finely but not densely punctured, with distinct alutaceous microsculpture and weak setae, parallel-sided for most of its length. Legs spinose, especially the anterior and intermediate tibiae. Length 14 mm .

Holotype : Mount Wilhelm, Field Station, 20. IX. 1968, New Guinea, (Dr. I. Loksa).

## Leptacinus biroi sp. n .

This species differs from L. socius Fauv. (from Australia) by not having the microsculpture and by the more triangular shape of the head, the much finer puncturation of the elytra and by the reddish colour of elytra and pronotum, in many respects it is similar to L. flavipennis Kr. (from India) but it is very much smaller and the elytra are completely red whereas in L. flavipennis they are pale yellow, suffused with darker coloration at shoulders and along suture.

Head black, otherwise rufous, legs paler. - He a d a little longer than broad (2.75:2.5), broadest at posterior corners, narrowing towards the anterior margin; shining, without microsculpture, strongly punctured on temples, vertex impunctate, frontal sulci distinct, lateral sulci with punctures, eyes not convex, their longitudinal diameter about one fourth of the length of the temples, with short fine lateral bristles, antennae with third segment shorter than the second, as broad as long, segments four to ten moderately transverse, last segment slender, acuminate, longer than the penultimate. Pronotum longer than broad ( $3.25: 2.25$ ), shining, without microsculpture, with the two longitudinal rows each with six punctures, narrowing towards the posterior corners which are rounded, broadest at anterior corners, anterior margin narrowing towards the neck, with short lateral slender bristles. - Elytra longer than broad ( $3.25: 2.5$ ), broader at posterior margin, moderately shining, without microsculpture, with a row of fairly close punctures from the humeral corners and others between this and the suture, with very short lateral setae. - Scutellum with two setiferous punctures. - A b domen shining, extremely sparingly and finely punctured, parallel-sided. Tibiae spinose. Length 4.5 mm .

Holotype: Friedrich-Wilhelmshafen, New Guinea, 1901 (Bíró).

## Thyreocephalus ohlmusi sp. n.

This specimen is larger than T. gigantulus Bernh., and the elytra have a single row of large punctures from the humeral corners and a row of very fine punctures bordering the suture, similar to those in T. taitiensis Bон. and T. splendens CAM. The colour of the elytra are of the same scintillating green as in Eulissus chalybaeus Mann.

Black, except the elytra which are green. - He a d about as broad as long measured from the insertion of the antennae, shining, without microsculpture; the frontal sulci shallow and broad and each terminating in a deep circular depression at the anterior inner margins of the eyes, there is a further depression containing two or three umbilicate punctures; eyes moderately convex, their longitudinal diameter about half the length of the temples which are bordered below and with a large area which is strongly rugose; antennae strongly geniculate, second segment much smaller than the third, fourth segment as broad as long, segments five to ten transverse, last segment elongate, narrower almost equal to the length of the two penultimate segments together; segments four to eleven with moderately short apical setae, and a very fine pubescence giving a velvety appearance. - Prono$\mathrm{t} u \mathrm{~m}$ a little longer than broad, shining, without microsculpture and puncturation confined to the lateral margins from which are moderately long bristles; broadest at the posterior third and then sharply narrowing to the "neck", it has a very faint median line which is more distinct and divides just before the posterior margin forming an inverted " $V$ ". - Ely tr a a little longer than broad at the "shoulders", as long as broad at posterior margin; shining, without microsculpture, with a row of about seven large punctures from the humeral corners and a row of smaller punctures along the sutural margins, with slender bristles at shoulders and setae along the posterior margins. - Scutel 1 um large, with large punctures and fine transverse microsculpture. - Abdomen with large elliptical-shaped punctures on basal third of each tergite, with long bristles extending from the sternites. Tibiae with dense short spines. Length 25 mm .

Holotype: Karimui, 1000 m, V. 1969 (H. Ohlmus).

## Thyreocephalus flavus sp. n .

This species differs from T. frater CAM. in having the elytra moderately densely punctured whereas in T. frater the punctures consist of the sutural rows and a row from the humeral corners which is quite a common arrangement in many species, and the posterior corners are rounded, in $T$. frater these are more angular. The elytra are pale yellow, in other species with a pale elytra the colour appears to a certain extent clouded with darker tints. This species is much smaller than T. celebensis Cam.

Head black with a slight green reflection, the pronotum with a slight purplish reflection, elytra completely straw-yellow, legs and mouth-parts yellow, antennae reddish except the last five segments which are cream-coloured. - He a d transverse (6:5), rounded, rather shining, without microsculpture, and two large inter-ocular punctures and another below the eyes which are narrowly but deeply channelled; eyes not very convex, their longitudinal diameter equal to the length of the temples; frontal sulci rather broad and not deep; antennae strongly geniculate, third segment a little longer than the second, fourth segment as broad as long, segments five to ten a little transverse, last segment bluntly acuminate, segments four to ten each a little broader than the previous; temples with a few long slender bristles. - Pron ot u m as broad as long, moderately shining, with minute "pin-point" puncturation, without microsculpture, convex, slightly narrowing to the posterior margin, anterior margin converging to the neck, long slender bristles laterally, these are longer anteriorly. - E 1 y t r a a little longer than broad at "shoulders" (7:6), broader at posterior margin, shining, rather coarsely and densely punctured, on either side of the suture in the middle is a larger puncture bearing a strong black spine, with shorter spare setae laterally. - Scutellum with two or three large umbilicate punctures. - Abdomen rather coarsely sparingly punctured with alutaceous microsculpture, with rather long hair-like bristles. Legs robust, tibiae strongly spinose. Length 10 mm .

Holotype : Simbang, Huon Golf, 1898 (Bíró).

## Metolinus fluvius sp. n.

Comparing this species with both M. discalis CAM. (Borneo) and M. javanicus CAM. (Java), the head is not so transverse, it is more strongly punctured, especially on the inner margins of the eyes, the pronotum has the rows of punctures much stronger and larger, and the whole body except the legs and antennae is black.

Antennae, palpi and legs yellow, legs darker, otherwise black. - Head as broad as long, moderately shining, with extremely fine microsculpture, median sulci very shallow in which are two or three punctures, the first two finely umbilicate, level with these are two punctures outside the sulci; lateral sulci short, deep, terminating in an umbilicate puncture, there are three small punctures near the posterior corners; eyes not convex, their longitudinal diameter about a third of the length of the temples which are parallel-sided; antennae short, first segment robust, broadening towards the apex, second segment much shorter, segments three to ten twice as broad as long last segment equal to the two penultimate together. - Pron ot um longer than broad (2.25:1.75), shining, with two longitudinal rows of six punctures, with an indistinct microsculpture, slightly converging to the posterior corners which are rounded but distinct, anterior margin narrowing strongly to the "neck". - E 1 y t $r$ a longer than broad (2.75:2), broader at posterior margin, with very small punctures arranged in a row bordering the suture, and a sparsely punctured row from the humeral corners. - S cutellum scarcely punctured. - A b domen moderately shining, impunctate, without microsculpture, some weak bristles from the ventral surface. Legs short, robust, tibiae with short spines. Length 4 mm .

Holotype: Wau, Kilolo Creek River, 31. VIII. 1968 (Dr. I. Loksa).

## Mitomorphus baloghi sp. n.

Compared with M. basimaculatus Bernh. (Philippine Is.) the head is smaller, eyes smaller, the pronotum more parallel-sided, the anterior margin not so strongly contracted to the "neck"'; against M. sattelbergensis sp. n., the head is smaller and not parallel-sided the tergites are not rugose at the base.

Reddish-brown, legs paler. - Head oblong-ovate, shining, without microsculpture, punctures small and in an irregular row, frontal sulci very short and shallow, laterally with short slender bristles, eyes small, not convex, temples much longer than diameter of the eyes (4:1), antennae of typical form, segments four to ten transverse and broadening to the apex, last segment about twice the length of the penultimate. - Pron ot u m longer than broad (3:2), shining, without microsculpture, with two longitudinal rows of seven or eight puncture, broadest at anterior fourth where the margin contracts to the neck; narrowing laterally where there are a few lateral bristles.-E1 y tra longer than broad (2.5:2), shining, very sparingly punctured, rather flat. - Scutellum with transverse microsculpture. - A b d o m e n shining, almost impunctate, with microsculpture on the sixth and seventh tergites, parallel-sided. Anterior and intermediate tibiae with short spines. Length 4 mm .

Holotype: Wau, Kilolo Creek River, $900 \mathrm{~m}, 23$. VIII. 1968. - Paratype, 1 ex.: Wau, Nami Creek, 1700 m, 22. VIII. 1968 (Dr. J. Balogh).

## Mitomorphus fauveli sp. n .

This species differs from M. javanus Cam. and M. drescheri Cam. (from Java) by the more densely punctured elytra; it is considerably larger that M. basimaculatus BERNH.

Blackish-brown, legs and antennae paler. H e a d elongate-ovate (5:3.5), without microsculpture, very sparingly punctured in posterior half, with distinct frontal sulci behind which are four quadrately placed punctures, eyes not convex, their longitudinal diameter one-fifth of the length of the temples which have some short fine bristles; antennae with segments four to ten transverse and each segment broader than the previous, last segment almost equal to the two penultimate, bluntly acuminate. - Pronotum longer than broad (5:3.75), without microsculpture, with two very irregular longitudinal rows of twelve to fifteen punctures, strongly contracting to the neck, narrowing a little to the posterior corners which are rounded, with a few lateral bristles, convex. - Ely tra longer than broad ( $5: 3.75$ ), strongly and moderately densely punctured, interstices broader than diameter of punctures, almost parallel-sided. - Scutellum large, with distinct reticulate microsculpture. - A bdomen finely and sparingly punctured, with fine reticulate microsculpture at base of tergites, with weak lateral bristles, parallel-sided. Legs spinose. Length $12-13 \mathrm{~mm}$.

Holotype : Erima, Astrolabe Bay, 1896 (Bíró). - Paratypes, 2 ex., Stephansort, Astrolabe Bay, 1897 (Bíró).

## Mitomorphus loksai sp. n.

Very similar to M. fauveli sp. n., but differs in having the head shorter and more parallel-sided and the puncturation of the elytra is denser.

Shining black, antennae and legs red. - He a d longer than broad (4.25:3.5), shining, without microsculpture, irregularly and sparingly punctured on posterior quarter as well as with four punctures in a quadrate formation behind the frontal sulci. (On some specimens of the genus these punctures can number five or six.) Eyes not convex, their longitudinal diameter one fifth of the length of the temples; parallel-sided, posterior corners rounded, anterior margin narrowing to the neck. Pronotum longer than broad (5.25:3.5), shining, without microsculpture, longitudinal rows of punctures very irregular and double for some of their length, more punctures towards lateral margins, broadest at anterior third, narrowing towards posterior corners which are rounded, anterior margin narrowing towards the neck, with a few lateral bristles. - Elytra longer than broad (5:3.75), very shining, moderately densely punctured, with fine short setae, parallel-sided.-S cute l1 um large with distinct alutaceous microsculpture. - Abdomen finely and sparingly punctured with fine lateral bristles, with fine reticulate microsculpture at the base of the tergites. Legs spinose, especially the tibiae. Length 13 mm .

Holotype: Wau, New Guinea, 8. IX. 1968 (Dr. I. Loksa).

## Mitomorphus minutissimus sp. n.

In size similar to Leptacinus minutissimus Cam. (from Angola) but it is different in many other details.

Reddish-yellow, elytra, legs, antennae and palpi paler. - Head longer than broad (1.9:1.6), very finely and diffusely punctured, frontal sulci obsolete, but punctures discernable, eyes. small not convex, their diameter one seventh of the length of the temples which broaden a little to the posterior corners which are quite distinct; antennae with second segment shorter than the first but a little longer than broad, segments three to ten very transverse, at least twice as broad as long, last segment acuminate, equal to the length of the two penultimate together. - Pronotum larger than broad (2:1.5), with two longitudinal rows of eight to ten very fine punctures, with a few laterally, parallel-sided anterior margin strongly converging to the narrow neck.- E 1 y t a a slightly longer than broad, moderately shining, puncturation not denser, not so fine as that of the head and pronotum, parallel-sided. - Scutellum shining, with evident microsculpture. - Abdomen with extremely fine and sparse puncturation, with segments five to seven longer than those previous. Legs robust, especially the femora and tibiae. Length $2-3 \mathrm{~mm}$.

Holotype: Kiunga, 23. VII.-2. VIII. 1969. - Paratype, same data (Dr. J. Balogh).

## Mitomorphus punctulatus sp. n.

This species differs from all other New Guinea species by the fine dense but very distinct punctures of the head.

Black to rufous, antennae dark red with last segment or last two segments white or creamy white; legs pale yellowish white, with tibiae and extreme base of femora darker. - Head longer than broad ( $3.25: 2.5$ ), shining, without microsculpture, densely punctured, less so between the base of the antennae; parallel-sided, posterior corners rounded, eyes not convex, their longitudinal diameter one fourth the length of the temples, frontal sulci short, the four quadrately placed punctures intermingled with the general puncturation, antennae with segments four to ten transverse, last segment acuminate, a little longer than the penultimate. - Pronotum longer than broad ( $3.75: 2.25$ ), shining, without microsculpture, finely and irregularly punctured, not forming two distinct rows but leaving a median impunctate area from the anterior almost to the posterior margin, broadest at about anterior third, broadly and weakly sinuate to the rounded posterior corners; anterior margin narrowing to the neck; with a few outstanding lateral bristles. - Elytra longer than broad (3:2.5), very finely and densely punctured and pubescent, with a longer bristle:
from the anterior corners.-S cutellum large, with alutaceous microsculpture. - Abdomen extremely finely punctured and pubescent, with alutaceous microsculpture at the base of the tergites, parallel-sided. Legs with short bristles on the tibiae. Length 5 mm .

Holotype: Wau, Kilolo Creelk, 26. VIII. 1968 (Dr. I. Loksa). - Paratype between Lae Bulolo, Merkham River br., 6. IX. 1968 (Dr. J. Balogh); paratypes, 5 ex., Sattelberg, Huon Golf, III. 1899 (Bíró).

## Mitomorphus similis sp. n.

The puncturation of the elytra is very similar to that of $M$. fauveli sp. n., but the head is broader and more parallel-sided, the puncturation of the pronotum is also similar to that species. The head is similar to M. loksai sp. n., but puncturation of elytra coarser. It is smaller than M. fuscipes CAM. (from Fahang), the elytral puncturation is similar to that of M. sedatus CAM. (Pahang), but the head is longer and the abdominal puncturation different.

Black, except legs, antennae and maxillary palpi which are dark red. - H e a d longer than broad (5:4), shining, without microsculpture, very sparingly punctured towards posterior margin, with the four punctures placed quadrately behind the frontal sulci, eyes small not convex, their longitudinal diameter a little more than one sixth of the length of the temples; antennae typical, with segments four to ten transverse and broadening, last segment longer than the penultimate. - Pronot u m longer than broad (5.5:3.75), shining, with two rows of eight or nine small punctures and a few laterally, broadest at anterior fourth, narrowing a little to the posterior corners, convex. - Ely tra longer than broad (5.5:4), strongly but not densely punctured, moderately shining, without microsculpture. - Abdomen very sparingly and finely punctured tergites with fine alutaceous microsculpture and reticulation at base of tergites. Tibiae spinose. Length 14 mm .

Holotype: Sattelberg, Huon Golf, New Guinea, III. 1899 (Bíró).

## Mitomorphus sattelbergensis sp. n.

This species differs from $M$. basimaculatus BERNH. (from the Philippines) by the different microsculpture of the tergites wich are rugose at the base of each, and the head is more parallel-sided. It is similar to M. purpurescens CAM. (from India), but the microsculpture of the tergites (with the exception of the last two) is absent. It is smaller than M. pubiventris CAM. (from Java).

Head and pronotum black, elytra coppery fuscus, abdomen reddish-black; legs, antennae and mouth parts reddish-yellow. - He a d longer than broad ( $3: 2$ ), moderately shining, without microsculpture, with four distinct punctures on the vertex in pairs, the anterior pair larger than the posterior, parallel-sided for most of its length, eyes small, the temples more than three times their longitudinal diameter, median frontal sulci short, second segment of the antennae much shorter than the first segment, three as long as broad, segments four to ten transverse, last segment short, acuminate. Pronotum with same dimensions as head, shining, without microsculpture, with two elongate rows of small punctures numbering six or seven, broadest at anterior third, then shallowly sinuate to the posterior corners; anterior margin to the neck, with a few weak lateral bristles. - Elytra a little longer than broad ( $3: 2.25$ ), shining, without microsculpture, very sparingly finely and irregularly punctured, almost parallel-sided.-Scutell u m quite large with distinct alutaceous microsculpture. - Abdomen with base of tergites rugose, almost impunctate, seventh tergite with more distinct extremely fine puncturation and transverse microsculpture, parallel-sided. Legs with tibiae finely setose, more strongly on posterior pair. Length 5 mm .

Holotype: Sattelberg, Huon Golf, New Guinea, 1899 (Bíró).- Paratypes: 39 ex., same data; 1 ex., Mt. Hansemann, Astrolabe Bay, 1901 (Bíró); 1 ex., Wau, Mount Kaindi, 10. IX. 1968; 1 ex., Wau, Kilolo Creek, 1000 m, 31. VIII. 1968; 1 ex., Wau, Nami Creek, 1700 m, 22. VIII. 1968 (Dr. J. Balogh).

## ALEOCHARINAE

## Zyras (Zyras) biroi sp. n.

This species is similar to $Z$. (Z.) karimuensis sp. n. (i. 1.), but differs by having the head, pronotum, and elytra less densely and strongly punctured, the antennae have the last three segments white, in $Z$. karimuensis only the last two are white.

Black, legs yellowish, tibiae darker, elytra reddish. - He a d broader than long (3:2,5), shining, without microsculpture, with a few isolated punctures, eyes convex, their longitudinal diameter equal to the length of the temples from which arise a few porrect bristles; antennae with segments two and three of equal length, each a little shorter than the first, the remaining segments are as long as broad or slightly transverse; all segments with distinct slender bristles. - Pronotum about as broad as long, shining, without microsculpture, sparingly and irregularly punctured, a deep craterlike depression opposite the scutellum, a little broader at anterior third, with lateral erect bristles; anterior corners rounded, posterior corners more distinct, laterally weakly sinuate near posterior corners, posterior margins declivous, with an extremely narrow margin throughout. - Elytra about as broad as long, shining, without microsculpture, moderately strongly punctured, interstices much broader than the diameter of the punctures, with short setae and lateral bristles, suture narrowly bordered. - Scutellum shining, with a few large punctures. - Abdomen very shining, a row of punctures at the base of each tergite, eighth tergite with margin a little bisinuate, paratergites with short bristles at the apex of each, gradually narrowing to the apex. Legs long, especially intermediate and posterior tarsi, with short bristles. Length 13 mm .

Holotypeq: Sattelberg, Huon Golf, 1899 (Bíró).

> Zyras (Zyras) biroi var. subflavus var. n. (Fig. 36)

Differs from the type by having the elytra dusky yellow-red. The puncturation of the pronotum is also more irregular. Median lobe of aedeagus: Fig. 39.

Holotype $\sigma^{1}$ : Sattelberg, Huon Golf, 1899 (Bíró).

## References

Fauvel, A. (1878): Les Staphylinides des Moluques et de la Nouvelle Guinée. - Ann. Mus. Civ. Genova, 12: 171-315, Pl. I-II.
Fauvel, A. (1880): Les Staphylinides des Moluques et de la Nouvelle Guinée (2émoire). - Ann. Mus. Civ. Genova, 15 (1879-1880): 63-122.

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