

New Species of Endomychidae (Coleoptera) in the collections of the Hungarian National Museum and other institutions

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A lot of about 1300 endomychids sent to for study by Dr. Zoltan Kaszab of the Magyar Nemzeti Múzeum includes specimens of many species not yet described. In reporting on this collection I also present descriptions of a few novae in the collections of Deutsches Entomologisches Institut, the Museum G. Frey, the Bayerischen Staatssammlung, the U. S. National Museum and Cornell University. For opportunity to study this material I acknowledge the courtesy of Dr. Hans Sachtleben, Mr. Georg Frey, Mr. Heinz Freude and Dr. Henry Dietrich. Especial thanks are due Dr. Kaszab. In addition to submitting the notable collection mentioned above he has permitted me to study the types of some species described by Csiki and by Fivaldszky. Dr. Delkeskamp has given indispensable help in allowing me to examine the types of many species of *Anidrytus*, *Epo- pterus* and *Stenotarsus* in the Gerstaecker material. Senior Scientific Officer J. Balfour — Browne of the British Museum has loaned specimens of African *Indalmus* and, with his usual helpfulness, has examined certain endomychid types in his care.

The measurements cited are in millimeters and, except for those over 10 mm., have been made by ocular micrometer. In the case of measurements of the pronotum the width, where not otherwise indicated, is across the greatest breadth; the length is along the mid-line. The notation „max. width” indicates the greatest breadth of the elytra from margin to margin, excluding humeral prominences and spines.

Genus *Bystus* Thomson

Bystus foveatus sp. n. Fig. 1.

The nearly hemispherical shape of this insect is typical of the genus. Diagnostic character are to be found in the structure of the antennae and pronotum. The antennae are ten-jointed and of ferruginous color except the three club joints, which are black. Joints 1 and 2 are stout, 3 slender, 4—7 subequal in length to 3 but progressively stouter, 8 and 9 similar in shape and size, obconic, longer than broad, 10 evenly widened from its base, longer than wide with the apex slightly emarginate. On each side of the base of the pronotum is a round fovea which opens laterally into a sharply impressed groove (lateral sulcus). This sulcus runs forward to beyond the middle of the pronotum and its apex is abruptly recurved. Both pronotum and elytra are minutely punctured and covered with a semi-erect, coppery pubescence. Length 2.4.

In antennal structure *B. foveatus* is most like *B. limbatus* (Gorham) of Mexico but that species has the elytra bi-colored and the last antennal joint scarcely longer than wide. *B. seminulum* (Gorham) from French Guiana is more coarsely punctured and the first two club joints of the antennae are broader than long.

Holotype: sex? Suapure, Venezuela, Caura River, July 3–13, 1900, E. A. Klags (Cornell Univ. 2952)

Genus *Stenotarsus* Perty

It is with some trepidation that I describe new species in this difficult genus. Many have already been described from South America, some briefly and some at great length, and until re-study of types can be made the proposal of additional names carries the risk of creating synonyms. This procedure, however is less likely to add to confusion than misidentification of material.

Stenotarsus cupreus sp. n. Fig. 2.

Short-oval, almost equally narrowed in front and behind, rustred with dense, coppery pubescence (the holotype is much abraded). Length 4,1; max. width 3; length antenna 2,3.

Similar in appearance to *S. cuprivestis* Gorham but with the pronotum broader at base and strongly narrowed anteriorly, its raised margins much narrowed behind, its lateral sulci consisting of a deep, punctiform fovea which is continued as a short groove. Antenna stout, long, joint 2 longer than wide, joints 7 and 8 subequal, about equal to 6 in length but broader, club as long as the preceding five joints together. In the female the antennae are slender, with joint 8 shorter than 7 and neither of these much broader than joint 6.

Holotype male and allotype female, Cochabamba, Bolivia, Germain (Magyar Nemzeti Múzeum). One male and two female paratypes have the same data.

Stenotarsus agnus sp. n. Fig. 3.

Long-oval in form, ferruginous with long, moderately dense, yellow pubescence. Antennae wholly ferruginous. Length 5,4; max. width 3,2; length antenna 2,8.

Similar in form and structure to *S. angustulus* Gerstaecker but with larger antennae which are entirely pale. The side margins of the pronotum are wider and more convex than in *angustulus* and the aedeagus, in dorsal view, is broader.

Male holotype and female allotype, Brasilia: Espirito Santo (Magyar Nemzeti Múzeum). Paratypes include one male and three females from Espirito Santo.

Stenotarsus obesus sp. n. Fig. 4.

Short-oval, rust-red with coppery pubescence. Antennae long and rather thick, the club about equal in length to the entire stalk, of which each joint except the second is longer than wide. Pronotum broad and short, its side margins a little narrowed behind, its lateral sulci short and ending posteriorly in a deep fovea. Elytra highly convex, their outline cordate. Length 5–5,5; max. width 3,9–4,5; length antenna 3.

Male holotype and female allotype, Jatahy, Goyaz, Brazil (Magyar Nemzeti Múzeum). One male and six female paratypes are from the same locality.

***Stenotarsus obtusus* Gerstaecker Fig. 5.**

Specimens before me are from Vilcamota, Pachitea and Chanchamayo, Peru. Dr. W. Forster collected a male on the upper Rio Chipiriri and a female at Chiquitos, Bolivia.

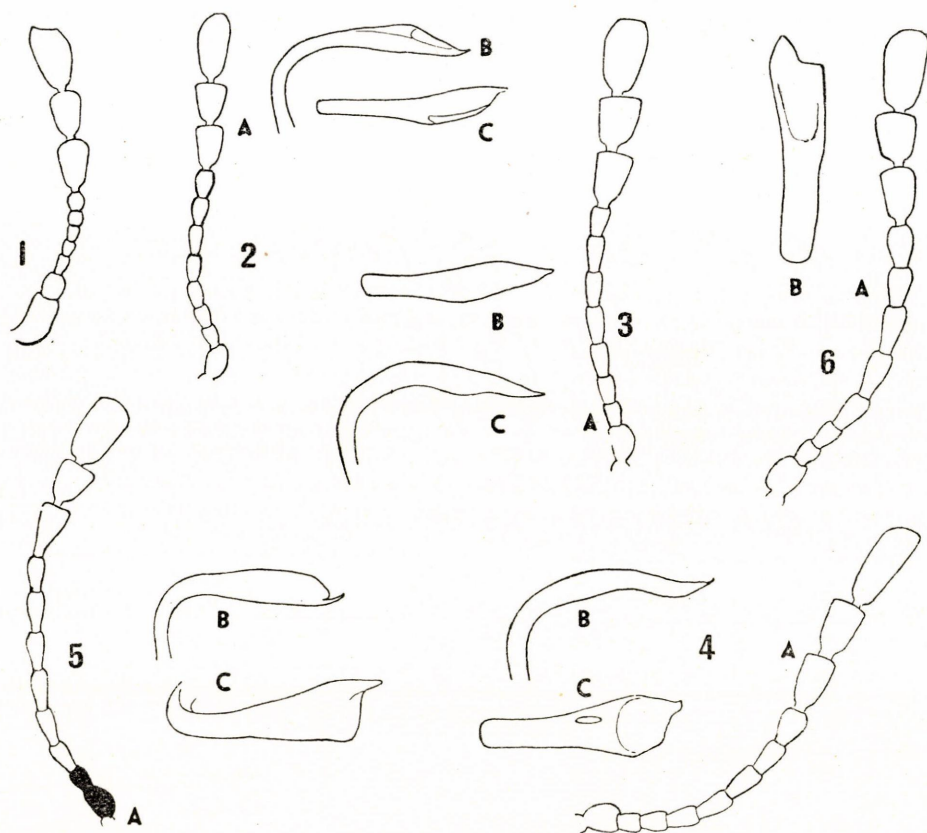


Fig. 1. *Bystus foveatus* sp. n. — antenna ; Fig. 2. *Stenotarsus cupreus* sp. n. — antenna (A), aedeagus, left lateral view (B), dorsal view (C) ; Fig. 3. *Stenotarsus agnus* sp. n. — antenna (A), aedeagus, left lateral view (B), dorsal view (C) ; Fig. 4. *Stenotarsus obesus* sp. n. — antenna (A), aedeagus, left lateral view (B), dorsal view (C) ; Fig. 5. *Stenotarsus obtusus* Gerst. — antenna (A), left lateral view of aedeagus (B), dorsal view of aedeagus (C) ; Fig. 6. *Stenotarsus porcellus* sp. n. — antenna (A), aedeagus, dorsal-view (B)

***Stenotarsus porcellus* sp. n. Fig. 6.**

Similar in size and coloration to *obtusum* but presenting a different appearance due to the decided break in outline between the pronotum and elytra. The pronotum is two and a half times as broad as long, its side margins very wide in front but narrowed at the hind angles to half their anterior width. On each

side of the base is a deep fovea, which opens mesad into a fine sulcus which crosses the pronotal base. The elytra are rapidly widened from the shoulders so that they attain their greatest width in the anterior third of their length and are thence evenly rounded to the apex. Length 6; max. width 4; length antenna 3.

Male holotype and female allotype: Pachitea, Peru (Magyar Nemzeti Múzeum). Two female paratypes also come from Pachitea.

Stenotarsus floccosus sp. n. Fig. 7.

Long-oval, ferruginous with long, dense, pale yellow pubescence. Antennae thin, entirely ferruginous but with the club somewhat darker. Length 7,2; max. width 5,2; length antenna 4.

Pronotum two and a fourth times as broad as long, its sides little curved except near the front angles, its raised margins rather narrow, broader in front. Elytra long-cordate, widest just behind the shoulders.

Gerstaecker specimens of *S. ictericus* which I have seen are all females but male specimens corresponding to them have the aedeagus shorter and stouter than that of *floccosus* and acutely rounded at the apex.

Male holotype: Espirito Santo, Brazil, Fruhstorfer coll. (Magyar Nemzeti Múzeum). A paratypic male has the same data.

Stenotarsus convexicollis sp. n. Fig. 8.

Of long-oval form, dark rust-red with fine, inconspicuous, golden pubescence. Antennae short and rather stout, joints 1–5 and 11 ferruginous, 6–9 black, 10 testaceous. Length 3,2; max. width 2; length antenna 1,3.

Pronotum twice as wide as long, its sides curved only near the front angles, its disc highly convex in front, its base strongly bisinuate. The lateral sulci are short, straight grooves. Elytra subparallel for most of their length, narrowed in posterior third.

Male holotype: Marcapata, Peru (Magyar Nemzeti Múzeum).

Stenotarsus Chujoii sp. n.

Short-oval, black, the basal area of the elytra bright yellow. Length 4,5; max. width 3,5; length antenna 2,2.

Pronotum with sides parallel in basal half, strongly rounded to the front angles, margins broad and flat, disc feebly convex, finely and sparsely punctured. Elytra finely punctured with rows of larger punctures. Antennae entirely black, joints 5,6 and 7 each a little longer than wide, 9 and 10 transverse, their inner apical angle acute, 11 ovoid, subtruncate at apex.

Male holotype: Formosa: Pilam I., Sauter (Magyar Nemzeti Múzeum).

Stenotarsus Beccarii sp. n. Fig. 9.

Oval in form, strongly convex, rust-red with the antennal club, the middle of the pronotal disc and most of the elytra black. The base and apex of the elytra are broadly red, the sides more narrowly so. Length 4,5; max. width 3.

Similar to *S. pardalis* Gerstaecker in structure but much smaller and with a color pattern like that of *S. plagiatus* Gorham. The antennae are stout, the stalk joints bead-like. The pronotum is a little more than twice as broad as long, its disc very finely and sparsely punctured, its margins strongly elevated, broad and feebly sulcate. Each elytron has eight rows of large punctures, those of the outer four rows coarser. The seventh and eighth row unite behind the umbo.

Male holotype : Palembang, Sumatra (Magyar Nemzeti Múzeum).

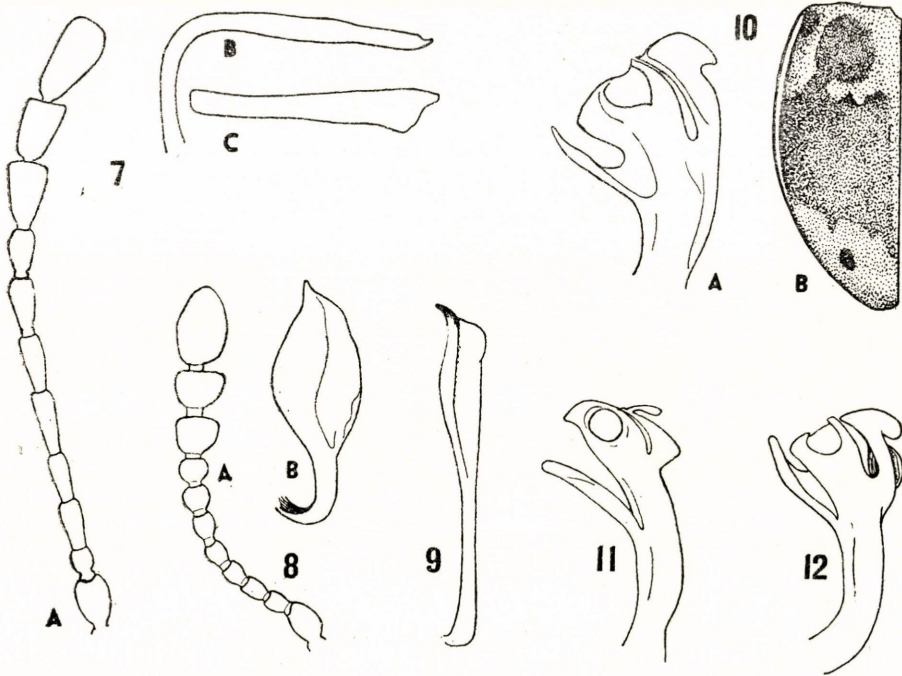


Fig. 7. *Stenotarsus floccosus* sp. n. — antenna (A), aedeagus, left lateral view (B), dorsal view (C); Fig. 8. *Stenotarsus convexicollis* sp. n. — antenna (A), aedeagus, dorsal view (B); Fig. 9. *Stenotarsus Beccarii* sp. n. — aedeagus, dorsal view; Fig. 10. *Epopterus transversus* sp. n. — aedeagus, ventral view (A), elytron (B); Fig. 11. *Epopterus nigrocinctus* sp. n. — aedeagus, ventral view; Fig. 12. *Epopterus reticulatus* sp. n. — aedeagus, ventral view.

A female specimen in the author's collection was taken at Ajer Mantjior by Beccari. *S. plagiatus* Gorham was described from material from Ajer Mantjior collected by Beccari and a co-type is now before me. In coloration *S. Beccarii* is identical with *S. plagiatus* but the pronotal structure is very different; in Gorham's species the pronotal base is unmarginated and the side margins are very little elevated, while in *Beccarii* the base of the pronotum is traversed by a deep groove and the side margins are high.

A closely related species is found in Java, as shown by a series of specimens in material received from Mr. A. M. R. Wegner of the Museum Zoologicum Bogoriense.

Study of the aedeagi of *S. pardalis* Gerstaecker, *S. ursinus* Gerstaecker and *S. leoninus* Gorham shows close similarity of all three. Perhaps all represent

subspecies of one wide-spread form. *S. pantherinus* Gorham and *S. bimaculatus* Pic should also be included in this complex. *S. Blackburni* mihi of Australia is distinct.

Genus *Epopteris* Chevrolat

This genus and *Anidrytus* are hardly distinguishable. In general, forms with varicolored pattern have been referred to *Epopteris*, the more somberly colored ones to *Anidrytus*, but structural features seem to indicate affinities between certain species of the two taxons which are closer than with their nominal congeners.

As is the case with the South American *Stenotarsus* the taxonomy of the genus *Epopteris* is in an unsatisfactory state. Past descriptions have been largely on color pattern but series of structurally identical specimens show this may be variable within a species, depending upon the state of maturity of the specimens at death. It seems futile to present lengthy descriptions of species so similar externally. The aedeagi show considerable diversity and seem to offer clear-cut taxonomic characters.

Epopteris transversus sp. n. Fig. 10.

The color pattern is as diagrammed, reddish-yellow, each elytron with the following black marks: a small humeral spot, a large, oval, basal spot which is narrowly connected to a broad, transverse band. Length 4,4; max. width 2,6.

Male holotype and female allotype: Cochabamba, Bolivia, Germain (Magyar Nemzeti Múzeum). Four females from Cochabamba are designated paratypes. In some specimens the basal spot is separated from the transverse band and there are two dark spots in the pale area of the elytral apex.

Epopteris nigrocinctus sp. n. Fig. 11.

Short-oval, rather broad, the upper surface brown, each elytron with two broad, yellow areas, of which the anterior is a transverse patch embracing the dark umbo and ending mesad far from the suture. The posterior yellow area is a pre-apical, transverse bar. Length 4; max. width 3,1.

Male holotype and female allotype: Amazon (Magyar Nemzeti Múzeum). The labels „Peru and Amazon” are shown by three male and two female paratypes in material sent by Dr. D e l k e s k a m p.

Epopteris reticulatus sp. n. Fig. 12.

Elliptical in outline, sparsely pubescent, yellow above with the disc of pronotum and five spots on each elytron dark brown. The pronotal spot is transversely rectangular while the dark elytral markings consist of a round spot on the humerus, an oval spot on the base, two elongate rectangles at the middle and a large round spot near the apex. The tip of the elytron is pale. Length 3,8; max. width 2,5.

The holotypic male is teneral with the pronotum entirely pale. The description of color pattern is based on the allotype and paratypic female.

Holotype male and allotype female: Cochabamba, Bolivia, Germain (Magyar Nemzeti Múzeum). The female paratype is also from Cochabamba.

***Epopterus similis* sp. n. Fig. 13.**

The pattern of the upper surface is like that of *E. nigrocinctus* but with stronger contrast of color. Length 4,5–5; max. width 3–3,7.

Male holotype: Haituba, Amazon sup. (Magyar Nemzeti Múzeum).

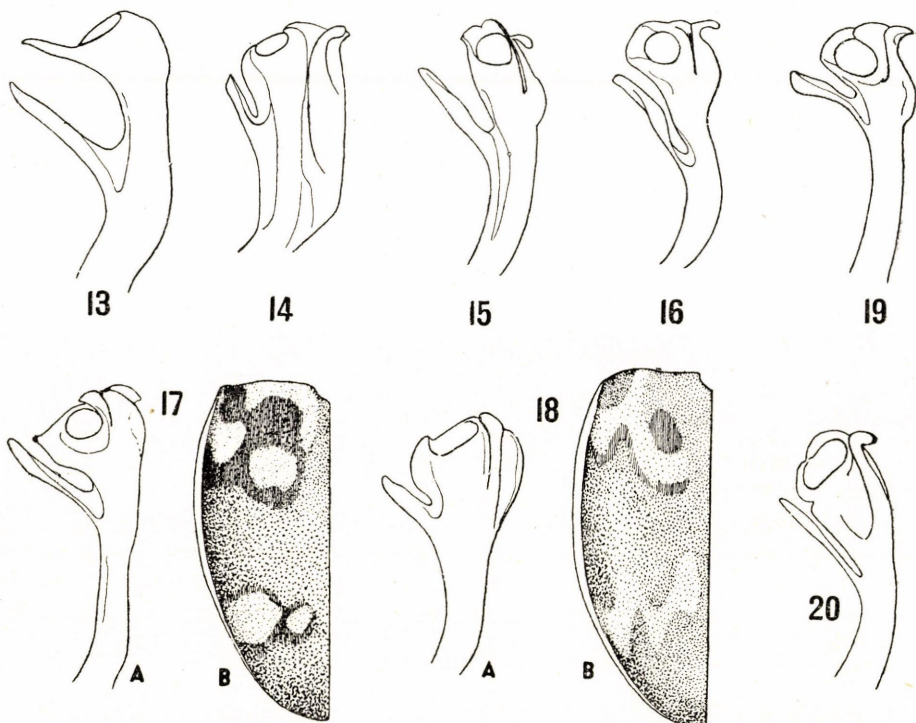


Fig. 13. *Epopterus similis* sp. n. — aedeagus, ventral view; Fig. 14. *Epopterus obliquus* sp. n. — aedeagus ventral view; Fig. 15. *Epopterus cordatus* sp. n. — aedeagus, ventral view; Fig. 16. *Epopterus flavolineatus* sp. n. — aedeagus, ventral view; Fig. 17. *Epopterus fasciatus* Fabr. — aedeagus, ventral view (A), elytron (B); Fig. 18. *Epopterus notatus* sp. n. — aedeagus, ventral view (A), elytron (B); Fig. 19. *Epopterus variegatus* Er. — aedeagus, ventral view; Fig. 20. *Epopterus deltoideus* sp. n. — aedeagus, ventral view.

Three males labeled "Amazon" seem from the form of the aedeagus to belong to this species but present differences in pattern. In one of these males the anterior yellow bar is connected to the elytral base by a narrow yellow band internal to the umbo while in another specimen there is an additional yellow band across the elytral base, curving along the scutellum. The contour of the pre-apical band also varies, tending to be exised by encroachment of the dark margin around it.

***Epopterus obliquus* sp. n. Fig. 14.**

Subparallel in form but with the elytra gradually narrowing from the anterior third. The upper surface is dark brown, each elytron with three yellow areas, the first a quadrate spot at the middle of the base, the second rounded and

post-humeral, the third a narrow, oblique bar on the posterior third. Length 4,4; max. width 2,6.

Male holotype: Haituba, Amazon sup. (Magyar Nemzeti Múzeum).

Epopterus cordatus sp. n. Fig. 15.

Elytra cordate in outline; the lateral margins broader than usual in the genus. The upper surface is generally brown, each elytron with a large, quadrate, yellow area at the humerus and continued as a narrow band along the base. There is also a transversely oval, yellow spot before the apex. Length 4; max. width. 3.

Male holotype: Amazon, Staudinger (Deutsches Entomologisches Institut). The Hungarian Museum material consists of two males and three females labeled "Haituba, Amazon sup." and seven females labeled "Amazon". A pair of specimens labeled "Amazonsgebiet" is in the Berlin Museum.

Epopterus flavolineatus sp. n. Fig. 16.

Similar to the preceding but smaller. Each elytron has a rather narrow, post-humeral, yellow bar which extends from the lateral margin across two-thirds the width of the elytron, and a similar yellow band on its posterior third. Length 3,5; max. width 2,4.

Male holotype and female allotype: Amazon (Magyar Nemzeti Múzeum). A single paratypic male is similarly labelled.

Epopterus fasciatus (Fabricius) Fig. 17.

According to Gerstaecker this is the species named by Fabricius. *E. vernicatus* Gerstaecker may be conspecific.

Specimens of *fasciatus* at hand are labeled "Haituba" and "Amazon".

Epopterus notatus sp. n. Fig. 18.

Elongate, subparallel, the upper surface brown, sparsely pubescent, the elytra marked with yellow and black as figured. Length 4,3; max. width 2,4.

Male holotype: Amazon (Magyar Nemzeti Múzeum).

Epopterus variegatus Erichson Fig. 19.

The figure of the aedeagus corresponds to that of a specimen determined by Gerstaecker as *variegatus*.

Epopterus deltoideus sp. n. Fig. 20.

Elytra long-cordate, yellow, each with the umbo, a basal spot and three small pre-apical spots black. Across the middle of the elytron is a wide, dark red band, bordered with black. This band is tri-dentate in front, and v-excised

behind. The three distal spots are arranged in a triangle behind the excision in the red band. Length 4; max. width 2,6.

This species is somewhat like *E. variegatus* Erichson and *E. decempunctatus* Gerstaecker but the elytra are more narrowed behind. In *decempunctatus* the basal elytral spot is larger and the three pre-apical spots from a transverse row. In *variegatus* there are only two (sometimes one) pre-apical spots and the median crossband is distinctly composed of two large spots.

Male holotype: Haituba, Amazon sup. (Magyar Nemzeti Múzeum).

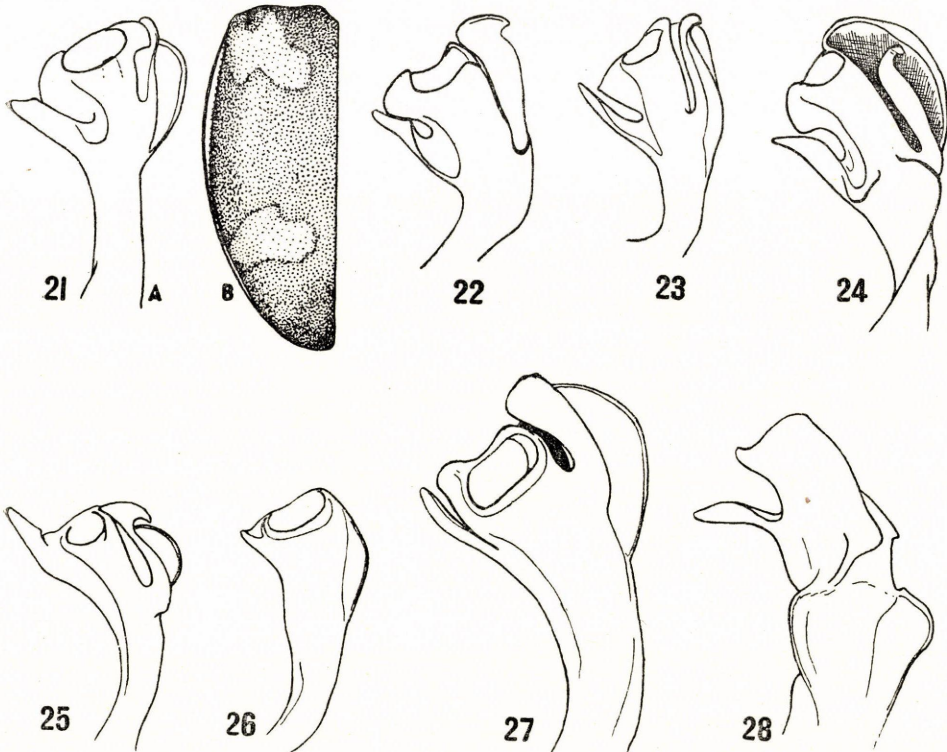


Fig. 21. *Epopterus cucullinus* Gorh. — aedeagus, ventral view (A), elytron (B); Fig. 22: *Epopterus longus* sp. n. — aedeagus, ventral view; Fig. 23. *Epopterus angustatus* sp. n. — aedeagus, ventral view; Fig. 24. *Epopterus Batesi* sp. n. — aedeagus, ventral view; Fig. 25. *Epopterus cyclicus* sp. n. — aedeagus, ventral view; Fig. 26. *Epopterus nigerrimus* sp. n. — aedeagus, ventral view; Fig. 27. *Epopterus zebra* sp. n. — aedeagus, ventral view; Fig. 28. *Anidrytus porcus* sp. n. — aedeagus, ventral view.

Epopterus cucullinus Gorham Fig. 21.

The specimens from which the drawings were made closely resembles a female example determined by Gorham but not agreeing entirely with his description of *cucullinus*. Length 5; max. width 3.

Epopterus longus sp. n. Fig. 22.

Elongate, subparallel in form and very much like *cucullinus* but narrower. The color pattern is also similar to that of *cucullinus* but the yellow markings are narrower and the posterior one more undulate. Length 4,5; max. width 2,5.

Male holotype: Amazon (Magyar Nemzeti Múzeum).

Epopterus angustatus sp. n. Fig. 23.

Elongate, subparallel but with the elytra gradually narrowed from the anterior third. The elytra are dark red, each with two yellow-white crossbands, edged with black. The anterior band is just behind the umbo and reaches the suture, where it is much constricted. The posterior band is about as wide as the anterior one and scarcely narrowed mesally. It almost touches the suture. Length 4,6; Max. width 2,6.

Male holotype and female allotype: Haituba, Amazon sup. (Magyar Nemzeti Múzeum).

Epopterus Batesi sp. n. Fig. 24.

Broader in form than the preceding but with similar color pattern. The upper surface is dark brown, almost black, each elytron with two yellow crossbands, these narrower than in *angustatus*. Length 4,8; max. width 3.

Male holotype and female allotype: Amazon (Magyar Nemzeti Múzeum).

Epopterus cyclicus sp. n. Fig. 25.

Short-oval in form. Pronotum ferruginous, elytra dark brown, each with yellow markings as follows: behind the umbo a band extends mesad where it is continued obliquely forward along the base almost to the umbo. The broad, pre-apical band is continued narrowly backward along the suture, then crosses the apex and reaches the outer margin, which is also yellow. The general appearance of the elytron is a dark field bearing two yellow rings. Length 4,2; max. width 2,9.

Male holotype and female allotype: Juanjui (Juantué), Peru (Magyar Nemzeti Múzeum). Paratypes: one male and two females from Juanjui. An additional male and three females are labeled „Amazon”. In some of these the anterior yellow ring is bisected by a narrow, yellow stripe internal to the umbo.

Epopterus nigerrimus sp. n. Fig. 26.

Of elongate, subparallel outline, the upper surface black, thickly and conspicuously punctured and with sparse, golden pubescence. Each elytron has two narrow red markings, the anterior Y-shaped and embracing the umbo, the posterior transverse and undulate. Length 4,6; max. width 2,7.

Male holotype: Jatahy, Goyaz, Brazil (Magyar Nemzeti Múzeum).

Epopterus zebra sp. n. Fig. 27.

Elongate, subparallel, the upper surface reddish-yellow. The pronotum has a W-shaped mark and median basal spot black. Each elytron has the following black marks: two round spots on the base, an undulate band before the middle, another band just behind the middle, and two large, coalescent spots before the apex. Length 5,9; max. width 3,3.

Male holotype, Peru (Magyar Nemzeti Múzeum).

Genus **Anidrytus** Gerstaecker

This is yet another South American genus which presents many species of similar external appearance but with great differences in the male aedeagi.

Anidrytus porcus sp. n. Fig. 28.

Short-oval, strongly convex, the pubescence short, sparse and yellow. Disc of elytron dark brown, pronotum and base and margins of elytra ferruginous. The first seven joints of the antennae are of ferruginous color, the remainder black. Length 5,7; max. width 3,8.

The male has the front tibia distally enlarged and bidentate beneath, the hind tibiae with a short but sharp tooth just before the apex.

Male holotype and female allotype: Amazon (Magyar Nemzeti Múzeum). A series of ten males and fourteen females are similarly labeled. Some of these specimens are entirely pale brown, evidently teneral, while others show various degrees of darkening of the elytra.

Anidrytus cupreatus sp. n. Fig. 29.

Large for the genus, of subparallel form, somewhat flattened above, ferruginous with coppery pubescence. The first three joints of the antennae are ferruginous, the rest black. Length 7,4; max. width 4,4.

In the male the front tibia is dilated at the apex into an obtuse flange and has a small tooth beneath. The middle tibia bears a row of long hairs on its inner margin and the hind tibia is gently curved.

Male holotype: Amazon sup. (Magyar Nemzeti Múzeum).

Anidrytus Kirschi sp. n. Fig. 30.

Extremely similar to the preceding but narrower and of darker color. The front tibia is like that of *cupreatus*. Length 7,4; max. width 4,3.

Male holotype: Peru (Magyar Nemzeti Múzeum).

Anidrytus Arrowi sp. n. Fig. 31a.

A species of the *ephippium* group, subparallel, flattened above. Upper surface ferruginous with sparse, yellow pubescence, the disc of the pronotum and elytra vaguely blackish. Possibly the mature pattern would show the pronotum

with a large, quadrate, black mark and the elytra black with pale margins. The first five joints of the antennae are reddish, the rest black. Length 6,1; max. width 3,3.

Male holotype: Espirito Santo, Brazil, Staudinger '98 (Magyar Nemzeti Múzeum).

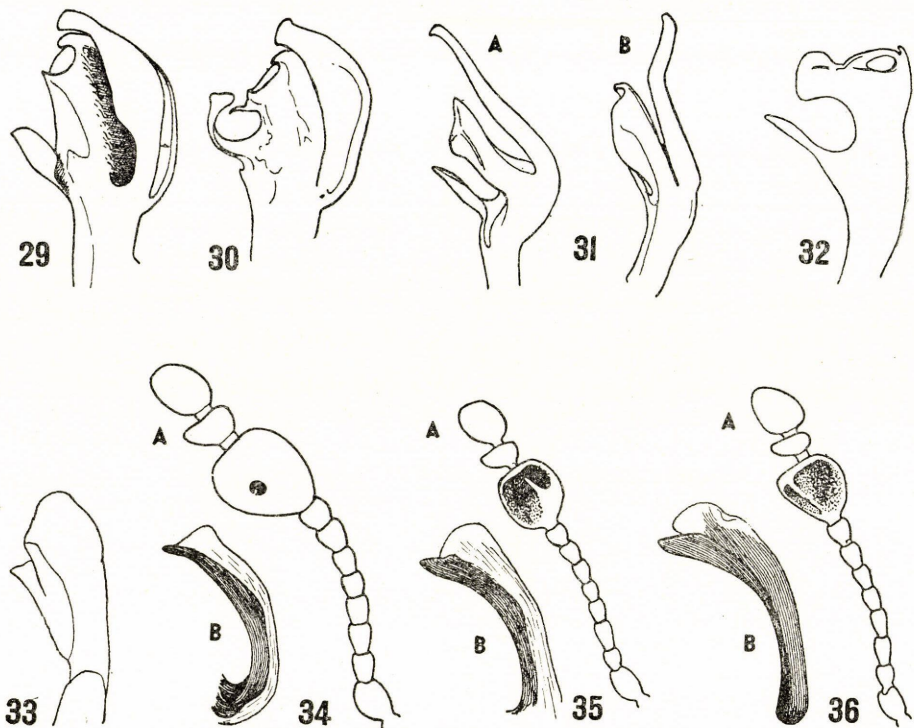


Fig. 29. *Anidrytus cupreatus* sp. n. — aedeagus, ventral view; Fig. 30. *Anidrytus Kirschi* sp. n. — aedeagus, ventral view; Fig. 31. *Anidrytus Arrowi* sp. n. (A), *Anidrytus latus* Gerst. (B) — aedeagus, ventral view; Fig. 32. *Anidrytus consobrinus* sp. n. — aedeagus, ventral view; Fig. 33. *Anidrytus tenuipes* sp. n. — aedeagus, ventral view; Fig. 34. *Danaë foveicornis* sp. n. — antenna of male (A), aedeagus, dorsal view (B); Fig. 35. *Danaë elliptica* sp. n. — antenna of male (A), aedeagus, dorsal view (B); Fig. 36. *Danaë pusilla* sp. n. — antenna of male (A), aedeagus, dorsal view.

Anidrytus consobrinus sp. n. Fig. 32.

Very similar, including the aedeagus, to *A. glaber* Kirsch but in *glaber* (as I have determined it) the upper, lateral process of the aedeagus is acutely rounded at its apex.

Short-oval, dark ferruginous with sparse, brassy pubescence. The front tibia of the male has a short, sharp tooth just distal to mid-length. Length 4,5; max. width 3.

Male holotype and female allotype: Amazon (Magyar Nemzeti Múzeum). The paratypic material comprises two males and two females.

Anidrytus tenuipes sp. n. Fig. 33.

Narrower than the preceding but very similar. The hind tibiae of the male are notably long and slender, the front tibiae feebly undulate but untoothed. Length 4,8; max. width 3.

Male holotype: Cochabamba, Bolivia, Germain (Magyar Nemzeti Múzeum). A single male paratype comes from the upper Amazon.

Genus **Danaë** Reiche

Examples of five new species of this troublesome genus are in the material sent by Dr. Kaszab.

Danaë foveicornis sp. n. Fig. 34.

Pronotum small, not quite twice as wide as long, its disc evenly and strongly convex, its side margins narrow, low and flat, the lateral foveae large and deep but without flanged rims. Elytra long, parallel, abruptly rounded behind. Length 3,8: max. width 2,9.

In the male, antennal joints 7 and 8 are thicker than those preceding, joint 9 is greatly enlarged, its inner apical angle obtusely rounded, its under surface convex except for a small pit.

Male holotype and female allotype: Kilimandjaro, 800 m., Alluaud and Jeannel, April 1912 (Magyar Nemzeti Múzeum). Paratypes: one male, one female taken at Taveta, 750 m. by Alluaud and Jeannel, one male and two females from Katona. Material in the Berlin Museum consists of one male and three females from Ikutha, e. Africa; two males collected by Schroeder in papyrus swamp s. e. Kilimandjaro; Kibwezi, Kenya, G. Scheffler, 11 males and 7 females; Tanganyika, 2 males 11 females (Methner, Vosseler, Hübner).

Danaë elliptica sp. n. Fig. 35.

Of parallel form, the pronotum and elytra meeting with scarcely a break in the outline. Pronotum almost twice as broad as long, its disc convex, its side margins broad, low and flat. Elytra gradually widened from the shoulders to beyond mid-length.

The antennae of the male have the eighth joint bead-like, the ninth moderately swollen, concave beneath with a high, thin carina which is incomplete distally. Length 2,9. max. width 1,4.

Male holotype, Ethiopie méridionale, Hieka—Bourka, Maurice de Rothschild 1905 (Magyar Nemzeti Múzeum)

Danaë pusilla sp. n. Fig. 36.

Hardly distinguishable from the preceding except by features of the male antennae and aedeagus. The apex of the ninth joint of the male antenna is angulate internally and the shallow concavity of its lower surface is divided by a low, obtuse carina. Length 2,9; max. width 1,4.

Male holotype: Nairobi, Ch. Alluaud 1904 (Magyar Nemzeti Múzeum). A male paratype bears the same data as the holotype. Another male paratype was collected on the Kenya prairies by Alluaud in 1909.

Both *pusilla* and *elliptica* resemble *D. caprella* mihi.

Danaë longa sp. n. Fig. 37.

Elongate, subparallel, the elytra broadest in their posterior third. Pronotum a little narrowed behind, its sides gently curved to the front angles, its raised margins very low. In the male, joints 7 and 8 of the antennae are stouter than those preceding, joint 9 is enlarged, with the apex distinctly angulate internally, its lower surface with a small fovea, which is bordered proximally by a low tubercle. Length 3,8; max. width 1,9.

Male holotype and female allotype: Nairobi, Ch. Alluaud, 1904 (Magyar Nemzeti Múzeum). Paratypes include two males and three females collected at Nairobi by Alluaud and a male from Taveta (Alluaud and Jeannel). Another male labeled „Pennsylvania”, undoubtedly in error, bears the tentative identification “*Hylaia testacea?*”.

Danaë masculina sp. n. Fig. 38.

From long-parallel, the sides of pronotum a little contracted basally, the side margins low, the disc closely punctured. Length 4,6; max. width 2,4.

Very much like *D. curvicrus* mihi in appearance and with similar but more curved aedeagus. Direct comparison with the monotype of *curvicrus* shows two salient external differences in male characters: the ninth antennal joint in *masculina*, while swollen, is much less so than in *curvicrus* (actually it is little wider than the tenth) and the process on the hind femur in *masculina* is a large flange rather than a broad tooth.

Male holotype and female allotype: Uganda: Katona, Mujenje, VII—1913, (Magyar Nemzeti Múzeum). The paratypic series, similarly labeled, comprises three males and three females.

Genus **Saula** Gerstaecker

Saula polita sp. n. Fig. 39.

Form usual for the genus, convex, dark brown in color and strongly shining. The pronotum has its front angles a little produced and rectangular, its sides sinuate, narrowed behind the middle and then slightly divergent to the acute hind angles. Elytra abruptly wider than the pronotum, gradually widened to about mid-length, evenly convergent behind. The antennal stalk is stout, approaching the condition in the genus *Tragoscelis* (*Heliobletus* Gorham), none of its joints notably longer than wide, the club equal in length to the preceding seven joints. Length 3,5; width 1,9.

Male holotype: Palembang, Sumatra (Magyar Nemzeti Múzeum). A female specimen from Brunei, Borneo is much like the holotype but may belong to another species.

Genus *Archipines* Strohecker*Archipines grandis* sp. n. Fig. 40.

Form usual for the genus, pronotum transversely rectangular, its front angles obtuse, its sides with a small lobe in front of middle, rectangular at base, the disc coarsely and closely punctured. Elytra abruptly wider than the pronotum, long-cordiform with broad side margins, which are widest just behind the umbo. The upper surface is brown, each elytron with a large, round, black spot at middle. The area around the spot is vaguely yellow. Antennae with the first seven joints pale, 8—11 black. Length 5.6; width 3.

Male holotype and female allotype: Amazon (Magyar Nemzeti Múzeum). A male paratype is similarly labeled while a female in my collection was taken at Ega by Bates.

Archipines macrospilota sp. n.

Head, pronotum and joints 7—11 of antennae black, elytra red-brown, each with a very large black spot in the middle. The reddish color and the great size of the elytral spot are distinctive. The body form is as usual in the genus, the sides of the pronotum with a small tooth behind the front angles, the elytra long-cordiform, much broader than the pronotum. Length 4.7; width 2.7

Female holotype: Amazon (Magyar Nemzeti Múzeum).

Genus *Indalmus* Gerstaecker

The African species of this genus present unusual taxonomic difficulty due to the external similarity, if not identity, of various species. Recently (Rev. Zool. Bot. Afr. 49: 142—146) I presented a synopsis of the *bivittatus* group, which comprises those species of smaller size with the upper surface more or less hirsute and the elytra unicolorous or marked with one or two broad, red or yellow stripes.

The other assemblage may be known as the *ephippiatus* group. Some, perhaps all, of the species of this group exist in two color phases. The upper surface may be generally yellow with the suture, umbo, margin and two discal strigae on the elytra black. The pronotum often shows two vague black spots on its disc. I shall call this the vittate phase. The other type of coloration, the maculate phase, presents a striking contrast; the pronotum is yellow or reddish but the elytra are shining black with two yellow spots, the anterior one deeply u-shaped, embracing the umbo and touching the base, the posterior very large and extending close to the apex.

Basing my determination of *Indalmus graphicus* (Gorham) on a male specimen labeled „*Ancylopus graphicus*”, I described *I. gorhami*, *I. ingratus* and *I. strigatus*. Receipt of additional material has shown a still more complex taxonomic problem. The following account is probably not a final systematization but will serve to clarify the nomenclature.

Indalmus graphicus (Gorham)

Ancylopus graphicus Gorham (1873) Endom. Recit., p. 41

Indalmus strigatus Strohecker (1954) Rev. Zool. Bot. Afr. 49, p. 146.

Mr. Balfour-Browne has re-examined the Gorham type and send me the surprising report that *strigatus* is a synonym. He also adds that the male type is not from Gambia, as stated by Gorham, but from Gabon. It is improbable that the Gambia females belong to this species.

Indalmus ingratus Strohecker Fig. 41.

I. ingratus Strohecker (1952) Expl. Parc Nat. Upemba, Miss. de Witte, Fasc. 7, p. 6

Specimens from Rhodesia and Mozambique in the British Museum appear intermediate in aedeagal structure between *ephippiatus* Gerstaecker and *ingratus*, suggesting that racial differentiation is involved. Specimens from northeastern

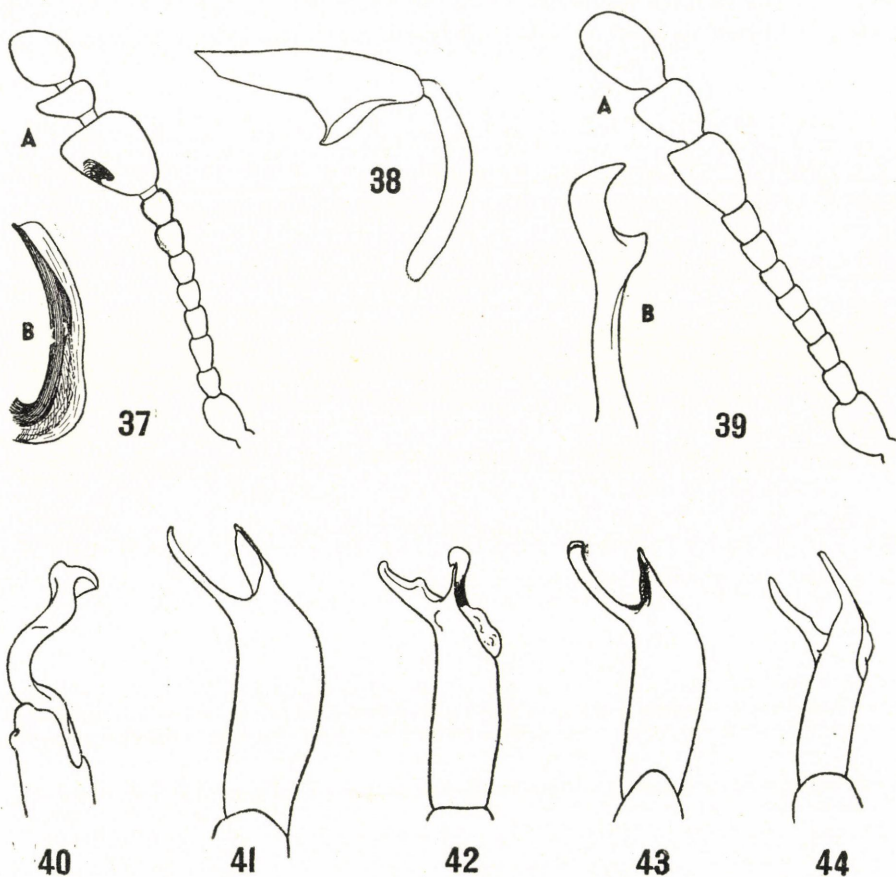


Fig. 37. *Danaë longa* sp. n. — antenna of male (A), aedeagus, dorsal view (B); Fig. 38. *Danaë masculina* sp. n. — hind leg of male; Fig. 39. *Saula polita* sp. n. — antenna of male (A), aedeagus, ventral view (B); Fig. 40. *Archipines grandis* sp. n. — aedeagus, dorsal view; Fig. 41. *Indalmus ingratus* Strohecker — aedeagus, dorsal view; Fig. 42. *Indalmus decipiens* sp. n. — aedeagus, dorsal view; Fig. 43. *Indalmus perjidus* sp. n. — aedeagus, dorsal view; Fig. 44. *Indalmus grandis* Pic — aedeagus, dorsal view.

Congo with the aedeagal structure of *ingratus* have the maculate pattern of typical *ephippiatus*.

Indalmus decipiens sp. n. Fig. 42.

Indalmus graphicus Strohecker (1939) Proc. Ent. Soc. Lond (B) 8, p. 119 nec Gorham 1873).

Elongate, subparallel. Pronotum reddish-yellow, the disc with two vague black spots. Elytra yellowish, the suture, margin, umbo and two discal strigae black. Length 7; width 3,1.

Male holotype: Mayidi, 1945, Rév. P. van E y e n (Musée Congo Belge). One male paratype is from Mayidi, three from Joko, Cameroon and one from Togo.

Indalmus perfidus sp. n. Fig. 43.

Indistinguishable from the preceding except by study of the aedeagus. Length 7; width 3,1.

Male holotype: Joko, Cameroon (Magyar Nemzeti Múzeum). A single male paratype is from Joko, Cameroon (Berlin Museum).

Indalmus grandis (Pic) Fig. 44.

Ancylopus grandis Pic (1921) Mém. Exot.-ent. 34, p. 1.

Indalmus gorhami Strohecker (1939) Proc. Ent. Soc. London (B) 8, p. 119.

Mr. A. Villiers, who has examined the Pic type, writes that my *gorhami* is the same as *grandis*. Presumably the identity was established by comparison of the male aedeagi but, even if Pic's type is a female, it will simplify the nomenclature to follow Villiers diagnosis.

Specimens from Abidjan, Cote d'Ivoire in the Museum G. Frey have the vittate color pattern. This form may be listed as *I. grandis vittatus*, but the trinomial may be superfluous.

Indalmus oblongulus Fairmaire.

I. oblongulus Fairmaire (1894) Ann. Soc. Ent. Belgique 38, p. 678.

No males of this species have come to my notice but two topotypic females differ from all the preceding species by having the pronotum deep black and conspicuously punctured. The elytra are also black, each with two red or reddish-yellow markings. The anterior of these is broadly u-shaped, remote from the base, with only its outer limb touching the umbo. The posterior red mark is oval and distant from the apex. As Fairmaire has remarked, its coloration is very similar to that of *Trycherus raffrayi* Gorham. *I. oblongulus* seems to be a link between the two groups of African *Indalmus*.

Indalmus ehippiatus Gerstaecker

I. ehippiatus Gerstaecker (1858) Mon. Endomychiden, p. 410.

In 1953 (Rev. Zool. Bot. Afr. 47, p. 85, fig 6) I illustrated the aedeagus of the presumptive type of this species. It is apparently restricted to the southernmost part of Africa, specimens from Mozambique and Rhodesia showing a transition to *ingratus*. While I am strongly of the opinion that *ingratus* is only a race of *ehippiatus* I do not now feel able to make a formalized statement.

Genus **Lycoperdina** Latreille

The genera *Hylaia*, *Dapsa* and *Lycoperdina* are difficult to define. The species hitherto referred to *Lycoperdina* have the antennal club two-jointed but specimens of an African endemichid at hand have three-jointed antennae although otherwise they show the structure of *Lycoperdina*.

Lycoperdina horrida sp. n. Fig. 45.

Ferruginous to testaceous in color, the eyes and antennal club black. The upper surface is covered with a stiff, brassy pubescence. Antennae stout, joint 2 about two-thirds as long as 3, which is as long as 4 and 5 together, 6—8 globular, 9 much broader than 8 and transverse, 10 slightly broader than 9, 11 almost square. Head broad, the interocular area twice as wide as one of the eyes, shallowly impressed on each side. Pronotum slightly contracted behind, the hind angles feebly acute, the disc strongly convex, the lateral sulci sharply impressed, straight and reaching to the middle of the disc, basal sulcus fine and close to hind margin. In the male the anteroventral carina of the middle and hind femora has a row of small, widely spaced teeth. Length 4 mm.

Male holotype and female allotype: Entebbe, Uganda, Nov. 1948, J. C. Bradley (Cornell University No. 2953). Four males with identical data are designated paratypes. A male collected by Alluaud and Jeannel at Mbuyuni, Kenya is much darker than the Uganda material but I can find no structural differences.

Genus **Amphix** Castelnau**Amphix politus** sp. n.

Dark red-brown to blackish-brown, very strongly shining. Antennae with entire stalk red-brown, the club black. Pronotum twice as broad as long, its front angles produced and subacutely rounded, its sides sinuate posteriorly and rectangulate at base, the disc shining, sparsely and finely punctured. Elytra widest near their base, gibbous, with scattered coarse punctures and very fine interstitial punctures. Length 8.4; width 5.8.

This species belongs to the *marginatus* group, in which the aedeagus is elongate, the elytral margins narrow and not bordered by a row of large punctures. Only in the species *vestitus*, *coriaceus*, *discoideus*, *nigripennis* and *politus* of this group is the antennal stalk entirely pale. In *vestitus* and *nigripennis* the elytra are widest behind the middle; *coriaceus* may be recognized by its dull blue color, *discoideus* by its bright green, red-bordered elytra. In none of these species are the elytra so convex as in *politus*.

Male holotype: Brazil, Feldegg (Magyar Nemzeti Múzeum). A male paratype has the same data as the holotype. Another male is labeled "Brasilia, Beske" and a third male has no locality data.

The male holotype bears the label "*interruptus integer* Csiki" but does not correspond to the description of that form.

Amphix archetypus sp. n. Fig. 46.

Broadly oval, the elytra moderately convex for the genus and a little extended behind. Upper surface dark brown, shining, the elytra very coarsely, subrugosely punctured. Length 7; width 5.

Antennae slender, stalk reddish, club black. Pronotum nearly three times as broad as long, its sides arcuately rounded from the slightly acute hind angles to the produced and acutely rounded front angles, the disc evenly convex from side to side, the lateral sulci short and straight. The punctures of the elytra are much coarser behind the middle, the side margins are bordered by a row of crater-like punctures. The under surface and legs are red-brown, paler than the dorsal surface.

Male holotype and female allotype: Turrialba, Costa Rica (author's collection). One male and three female paratypes are from Turrialba.

This species is clearly annectant between the genera *Amphix* and *Acinaces*. The body form and aedeagus seem to relate it to *Acinaces* but the pattern of puncturation and the structure of the labial palps are those of *Amphix*.

***Amphix Klagesi* sp. n. Fig. 47.**

Oval in outline, the elytra longer than in most species of the genus but less so than in *dentatus* and *perforatus*. Under surface legs and pronotum red, antennae red at base with the last six joints black. Elytra bluish-black with the margin and base red, scutellum red. The broad lateral margins of the elytra are bordered internally by a row of large punctures, the elytral disc has coarse, widely spaced punctures with the interstices finely punctured.

In the male the middle tibia is excavated near the apex, the hind tibia abruptly incurved at the apex. The first sternite has a small tubercle at the center of its posterior margin and there are minute tubercles in similar position on sternites 3 and 4. Length 7,2 mm.

Closely allied in structure, including form of aedeagus, to *A. lividus* (Bates) of Brazil. That species is uniformly brown above with the antennae black except for the first one or two joints. The hind tibia of topotypic *lividus* (male) is stouter than that of *Klagesi* and scarcely incurved at the apex but I suspect that *Klagesi* will prove to be a race of *lividus*.

Male holotype and female allotype: Suapure, Venezuela, Caura River, V-6-20-1899, E. A. Klages (Cornell University No. 2954). A single female paratype has the same data.

Genus ***Mycetina*** Mulsant

***Mycetina aptera* sp. n.**

More flattened above and of flimsier texture than the other known species of the genus, but showing the characteristic structure of *Mycetina*. The prosternum is broad and produced posteriorly, the mesosternum triangularly narrowed cephalad. A very distinctive feature of the present species is the complete absence of wings.

Pronotum with the hind angles a little divergent and acute, basal sulcus deep, lateral sulci obsolete, disc finely punctured. Antennae rather slender but with joints 6 and 7 quadrate, 8 transverse. Head and pronotum brown with blackish suffusion, elytra blackish-brown, the base, suture and outer margin paler. The first three joints of the antennae are pale, the remainder testaceous. Length 4; width 2,4.

Female holotype: Kilimandjaro, 2700—2800 m., Alluaud and Jeannel, 1912, (Magyar Nemzeti Múzeum).

Genus *Trycherus* Gerstaecker

In recent years study of material in the Paris Museum by Villiers and in the Congo Museum by the author has revealed many species of this distinctively African genus. Some of the forms to which specific names have been given may prove to be of racial rank. At hand are examples of two additional species.

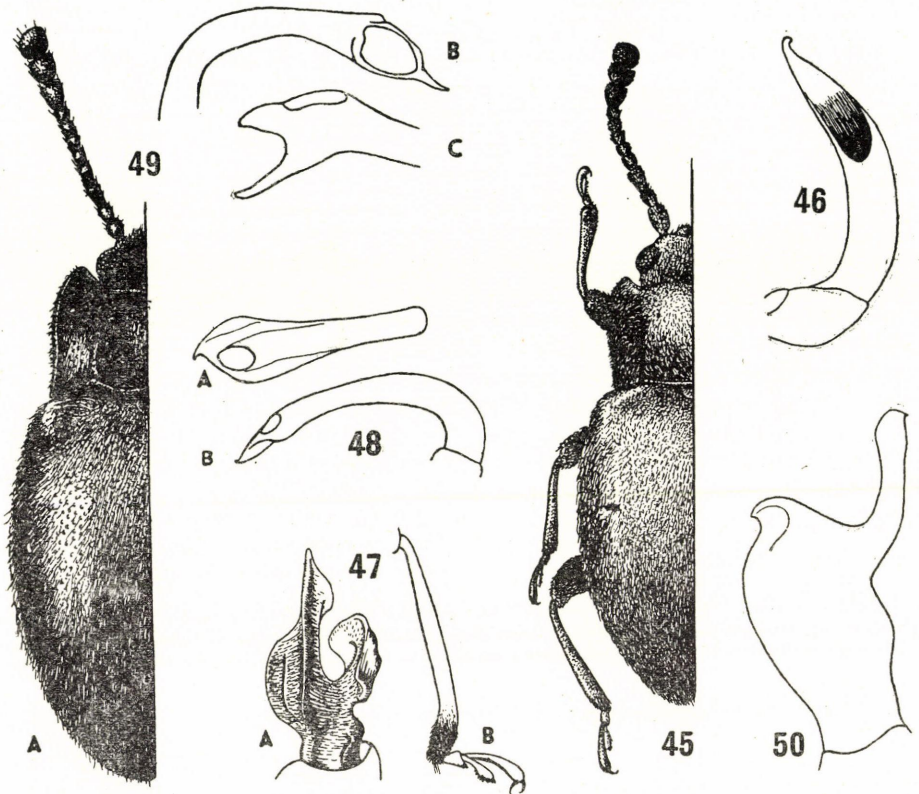


Fig. 45. *Lycoperdina horrida* sp. n.; Fig. 46. *Amphix archetypus* sp. n. — aedeagus, right lateral view; Fig. 47. *Amphix Klagesi* sp. n. — aedeagus (A), hind tibia of male (B); Fig. 48. *Trycherus centurio* sp. n. — aedeagus, dorsal view (A), right lateral view (B); Fig. 49. *Trycherus avus* sp. n. (A) — aedeagus, left lateral view (B), dorsal view (C); Fig. 50. *Engonius obliquus* sp. n. — aedeagus, ventral view.

Trycherus centurio sp. n. Fig. 48.

Related to *T. erytlyoides* Gerstaecker and of the same form, the elytra long-cordate, gradually narrowed from their anterior third. Upper surface dark red, each elytron with a transverse yellow band in front of middle. The anterior edge of the yellow band is u-shaped, the concavity occupied by a black area which extends forward as a triangle to the umbo. The posterior

edge of the yellow bar is briefly tridentate and vaguely bordered by black. Probably the elytra are black rather than red when fully matured. Surface shining, finely and thickly punctured. Length 8; width 4,5.

In the single male at hand the apex of the front tibia is curved and minutely tuberculate, the middle tibia is incurved and bears a long tuft of hairs just distal to mid-length. Sternites 1—4 have a small tubercle at the center of the hind margin.

Male holotype: Joko, Cameroon (Magyar Nemzeti Múzeum).

Trycherus avus sp. n. Fig. 49.

Long-oval in form, entirely dark brown, almost black, the upper surface clothed with a rather dense, gray pubescence. Length 5,2; width 2,9.

Antennae stout, joint 3 not as long as 4 and 5 together, joints 6—8 bead-like, club narrow and but little flattened. Pronotum with lateral sulci broad and deep, extending to middle of disc, basal sulcus narrow but deep, front angles produced and acutely rounded, hind angles slightly acute. Elytra regularly oval, much broader than pronotum, moderately convex, densely and coarsely punctured.

Male holotype: Kigonsera, Tanganyika, Hartl, 1954 (author's coll.). Paratypes consist of two males and two specimens of undetermined sex from Tanganyika (Zoologisches Museum-Humboldt Universität). A female specimen from Zululand is very similar but probably represents yet another species.

At first glance this insect may be taken for a *Lycoperdina* or *Indalmus* but the produced front angles of the pronotum and structure of the prosternum are those of *Trycherus*. The prosternum distinctly separates the front coxae and is prolonged behind them. As the specific name suggests this species may represent the stem of the genus *Trycherus* and suggests its derivation from *Lycoperdina*.

Genus **Engonius** Gerstaecker

Engonius obliquus sp. n. Fig. 50.

Black, moderately shining, each elytron with a post-humeral lunule and pre-apical, circular spot orange-red. Length 10,5; width 4,9.

Similar to *E. humeralis* Arrow of Indo-China, from which it differs in the elytral markings and the structure of the aedeagus. The anterior elytral mark is much like that of *E. perspicillaris* Gerstaecker, i. e. a lunule obliquely placed behind the umbo with its inner limb almost reaching the elytral base. The edges of the lunule are not angulately widened as in *humeralis*. The posterior elytral mark is almost perfectly circular. *E. obliquus* is a little smaller and slenderer than *humeralis*, with the elytra more finely punctured and the lateral ramus of the aedeagus broader. It is larger than *perspicillaris*, from which it differs strongly in form of aedeagus. It resembles both these species (as well as some others) in external male characters, i. e. the front tibia has a large, sharp tooth at mid-length, the middle tibia is toothed and curved and the last sternite is flattened, produced and broadly excavated at the apex.

Male holotype: Palembang, Sumatra (Magyar Nemzeti Múzeum).

Genus *Eumorphus* Weber

It is surprising to find examples of an undescribed species of this much studied genus in the lot of specimens submitted by Dr. K a s z a b.

Eumorphus Csikii sp. n.

Small for the genus, strongly convex, entirely black except for two large, yellow spots on each elytron. Length 8,5; width 4,5.

This insect has the superficial appearance of a small *E. alboguttatus* but is, in its structure, more closely related to *E. Westwoodi*. The elytral spots are pale yellow. The antennae are like those of *Westwoodi* in the shortness of joints 4—8. The antennal club is quite broad with joint 9 concave beneath, with a dense row of long, distally-directed setae. The front tibia is feebly undulate, its inner margin minutely serrate, its inner apical angle produced into a small, sharp tooth. The middle femur has a row of long hairs on its posterior surface and the hind tibia is slightly undulate. This is a very distinctive species.

Male holotype: Sumatra: Montes Battak, coll. F r u h s t o r f e r (Magyar Nemzeti Múzeum). A male paratype has the same data as the holotype.

Genus *Spathomeles* Gerstaecker

It has been thought that elytral spines in this genus are present in the male only, but a specimen from Borneo which shows the elytral pattern of *S. retarius* Strohecker and has elytral spines proves, on dissection, to be a female. The spines are wholly vertical in this specimen, not bent as in the male type of *retarius*.

Spathomeles turritus dispar Fivaldszky

I have suspected that this form, briefly noted by F r i v a l d s z k y, would prove to be a distinct species but comparison of the monotype of *dispar* with Malayan material of *turritus* shows no structural difference. The aedeagi seem to be identical. In the Bornean form each elytron has a single yellow mark, which is a round, slightly elevated spot between the spine and the apex. In nominate *turritus* there is another yellow spot in front of the spine.

Spathomeles Fivaldszkyi sp. n.

Extremely similar to *S. turritus* Gerstaecker in structure and size. The tibiae of the male are similarly modified, i. e. each of the three pairs is curved, and minutely tuberculate at the distal third. The aedeagus shows but slight difference from that of *turritus* and the elytral spines are also similar but a little more curved apically.

The upper surface is finely muricate, black, feebly shining, with minute punctures. Each elytron has, in front of the spine, an obtusely angulated, red band, obliquely placed, and another red band before the apex. These elytral markings are not all elevated. The apex of the elytra is somewhat truncate, with the outer angle rounded. Length 10,8; width 5,6.

Male holotype: Baramfluss, Borneo, K ü k e n t h a l' 94 (Magyar Nemzeti Múzeum).

Genus **Amphisternus** Germar

It is my intention to prepare before long a synopsis of most or all of the species of this interesting genus but for the present I shall present only descriptions of several new species

Amphisternus opacus sp. n.

Close to, and possibly a subspecies of *A. tuberculatus* Germar. Upper surface opaque black, each elytron with a small, round tubercle of red color in front of mid-length and a small, orange spot before the apex. In addition to these markings the elytron has, near the scutellum, a short, low carina which includes a small, dark, shining tubercle. The sides of the pronotum are less rounded than in Germar's species and the carination of the elytral shoulders less developed. The punctures of the elytra are fine, shallow and rather sparse. Length 9; width 4,8.

Male holotype: Pontianak, Borneo Hollandais (Magyar Nemzeti Múzeum).

Female allotype: Borneo Hollandais (Magyar Nemzeti Múzeum).

Amphisternus Kaszabi sp. n. Fig. 51.

Black, upper surface finely muricate, the punctures dense, shallow, moderately large but not at all confluent except on the elytral elevations. Pronotum with front angles considerably produced and acutely rounded, its sides almost parallel but slightly undulate, hind angles briefly spiniform, disc with a feeble median groove and a broad, shallow impression on each side. Each elytron has a posthumeral spine, which is directed outward at right angles to the margin. The elytral disc has a conoid elevation, which is rugosely punctured except at the extreme summit. Other features of the elytra are two red tubercles, one near the scutellum, the other pre-apical, both surrounded by a diffuse red area. The elytral apex is obliquely truncate. Length 8,6; width 4,4.

Male holotype: Borneo orientalis, H. L. Krieb (Magyar Nemzeti Múzeum).

In the form of the elevation of the elytral disc this species is most like *A. mucronatus* Gerstaecker and *A. vomeratus* Gorham. The second of these has no post-humeral spine, while in *mucronatus* this spine is short and the front angles of the pronotum are obtusely rounded.

Amphisternus Bakeri sp. n. Fig. 52.

Upper surface black, finely muricate, opaque, each elytron with two shining, red pimples, one near the scutellum, the other preapical. The red pimples are oblong in outline and each is surrounded by a diffuse red area. Pronotum with sides somewhat undulate, subparallel, the front angles produced and acute, punctures of the disc scarcely perceptible. Each elytron has a post-humeral spine and a single discal spine. The punctures of the elytra are rather coarse, but shallow and inconspicuous. They are obsolete on the conoid bases of the spines. Length 6,9—8,3; width 3,3—4.

The male has the hind angles of the pronotum briefly spiniform and the elytral apices truncate. In the female the hind angles of the pronotum are rectangular and the outer apical angle of the elytra is triangulate.

In its dull, sooty-looking surface this species resembles *A. spinosus* Gorham of Sumatra but in *spinosus* the front angles of the pronotum are very long and reflexed and the apex of the elytra is spinose. It seems appropriate to commemorate in the *Endomychidae* the name of Dr. C. F. Baker, who has brought to our attention many species of this family, most of them described by Gilbert Arrow.

Male holotype and female allotype: Sandakan, Borneo, Baker (U. S. National Museum No. 63446). Three male and one female paratype have the same data.

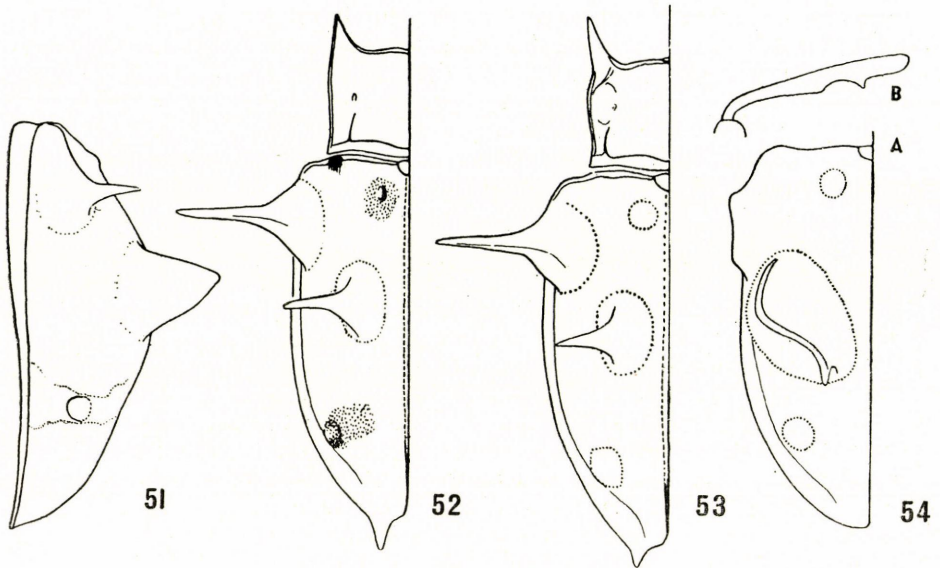


Fig. 51. *Amphisternus Kaszabi* sp. n. — left elytron, side view; Fig. 52. *Amphisternus Bakeri* sp. n. — Fig. 53. *Amphisternus nigrellus* sp. n.; Fig. 54. *Amphisternus mastophorus* sp. n. — elytron (A), front tibia of male (B).

***Amphisternus nigrellus* sp. n. Fig. 53.**

Most of the above description would apply to this form also. The single available specimen, a female, differs from that sex of *Bakeri* in having the front angles of the pronotum narrower and subspiniform, resembling, in this respect, *A. spinosus*. The sides of the pronotum are more undulate than in *Bakeri*, while the triangular production of the elytral apices is somewhat less in *nigrellus* than in the preceding species. Length 8.3; width 4.2.

Female holotype: Sandakan, Borneo, Baker (U. S. National Museum No. 63447).

***Amphisternus mastophorus* sp. n. Fig. 54.**

Upper surface black, subopaque, punctures small, shallow and sparse. Each elytron has a round, basal tubercle of red color and a similar tubercle before the apex. The disc of the elytron bears a tumid elevation surmounted

by a low, sinuous carina which ends posteriorly in a rounded projection. Length 10,2; width (at humeri) 5,5.

Allied to *A. hamatus* (Guérin) and more so to *A. tuberifer* Frivaldszky. Pronotum with lateral areas reflexed, its sides contracted behind, much rounded to the front angles, which are strongly produced and slightly acute. Elytra strongly carinate at the humerus, gradually rounded apically.

The single specimen at hand is a male. Its front tibia bears a short, broad tooth at the apical fourth and above this tooth the inner margin is arcuately excised (*A. tuberifer* has the front tibia modified in identical fashion). The fourth sternite is bi-tuberculate.

Male holotype: Sandakan, Borneo, B a k e r (U. S. National Museum No. 63 448).

***Amphisternus Freudei* sp. n. Fig. 55a.**

Apparently most closely related to *A. auriculatus* Gerstaecker, (Fig. 55b) which it closely resembles in size and contour. The elytral spines are also similar. The upper surface is dark blue, subopaque, the punctures small and shallow. The pronotum has the front angles produced, a little incurved and reflexed at tip, the apex acutely rounded. There is a slight indication of a median groove toward the base of the pronotum. In addition to the subhumeral and discal spines each elytron has two dark tubercles, one basal, the other pre-apical. These tubercles are smaller than in *auriculatus* but the posterior one is similarly carinate. Length 7,8—9,4; width 4—4,5.

In the male the apex of the elytra is obliquely truncate. In the female the outer apical angle of the elytra is prolonged into a flat, triangular process.

Male holotype: Tebing-Tinggi, n. e. (lung). Paratypes consist of one male labeled as the holotype, a male and a female from Soekaranda (D o h r n), a male from Tebing-Tinggi (D r. S c h u l t h e i s s), a male labeled "fl. Balang-harileko, B a n d a t H o r s t". The last four specimens are among the material of the Magyar Nemzeti Múzeum.

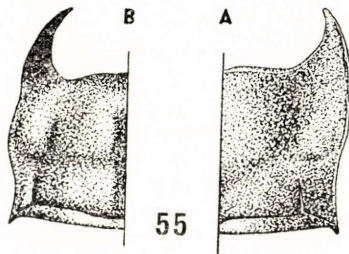


Fig. 55. *Amphisternus Freudei* sp. n. (A), *Amphisternus auriculatus* Gerst. (B) — pronotum.

***Amphisternus satanas* (Thomson)**

Three males of this spectacular Bornean beetle are at hand. Gerstaecker, in his 1858 monograph, mentions a single female in the Thomson collection, presumably the type. The species has not appeared subsequently in the literature except in catalogues. Females associated with a male in material from the Chicago Natural History Museum agree closely with the Thomson and Gerstaecker descriptions. All three males differ from the females in having the basal and pre-apical elytral tubercles red instead of dark blue. The front tibiae of the males are briefly dentate. Other than these differences they conform closely in structure to the females. The presence of two spines on the disc of each elytron makes this species very easy to recognize.

