

INSTITUT DES PARCS NATIONAUX DU CONGO ET DU RUANDA-URUNDI

PUBLIÉ AVEC LE CONCOURS DE L'INSTITUT BELGE
POUR L'ENCOURAGEMENT DE LA RECHERCHE SCIENTIFIQUE OUTRE-MER
(I.B.E.R.S.O.M.)

Exploration du Parc National de l'Upemba

MISSION G. F. DE WITTE

en collaboration avec

W. ADAM, A. JANSSENS, L. VAN MEEL et R. VERHEYEN (1946-1949).

FASCICULE 63

1. **EUCNEMIDAE Y THROSCIDAE**, por ANTONIO COBOS (Almeria).
2. **CASSIDINAE**, by STANLEY SHAW (Coventry).
3. **FULGORIDAE**, par HENRI SYNAVE (Bruxelles).
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Fascicule 63 (1)

EUCNEMIDAE Y THROSCIDAE⁽¹⁾ **(COLEOPTERA DASCILLOIDEA)**

POR

ANTONIO COBOS (Almería)

Se trata de un pequeño lote de *Eucnemidae* y *Throscidae* procedente de la vasta reserva biológica del Upemba, que como en el caso de los materiales de la Misión H. DE SAEGER (Parque Nacional de la Garamba), me ha sido confiado por M. V. VAN STRAELEN, conjuntamente, para su estudio.

Todo el material, 18 ejemplares con 5 especies en total, ha sido recogido por la Misión G. F. DE WITTE (1947-1948), habiendo resultado nueva para la Ciencia una especie de *Eucnemidae*.

El Parque Nacional del Upemba, el más vasto del ex Congo Belga, ubicado en la región de Katanga, es el único que no tiene fronteras comunes con país vecino alguno, situándose sin embargo en una zona de convergencia de regiones biogeográficas que lo hacen sumamente interesante. Los insectos examinados, excesivamente reducidos en especies para deducir consideraciones zoogeográficas importantes, se compone en su mayor parte (3 especies sobre 5) de elementos de amplia repartición trópico-africana, o al menos ecuatorial, más 2 formas (una aparentemente localizada) de posible gran distribución guineo-congolesa.

(1) Depositado el 7 de marzo 1961.

EUCNEMIDAE.

Arrhipis africanus FLEUTIAUX.

Kaswabilenga, 700 m alt., 6-9.X.1947, 5 individuos.

Riv. Lupiala (affl. dr. Lufira), 700 m alt., 6-9.X.1947, 1 individuo.

Lukawe (affl. rive dr. Lufira), 700 m alt., 30.IX.1947, 1 individuo.

Especie bastante común, extendida por todo el Africa ecuatorial (cf. FLEUTIAUX, 1945; COBOS, 1959).

Prodirrhagus straeleni nov. sp.

(Fig. 1.)

Long.: 9 mm. — Coloración general castaño-rojiza, con la cabeza y el protórax oscurecidos, patas testáceas, mate por encima salvo los élitros que son bastante brillantes, revestido de corta y poco densa pilosidad reclinada, amarillenta, no condensada ni formando dibujos en ninguna parte. Frente poco convexa, densamente puntuado-rugosa, casi granugiente, con una ligera impresión puntiforme antebasal, casi enteramente recorrida por una fina quillita aplastada, lisa, en sentido longitudinal mediano; base del epístoma casi doble ancha que el espacio suprantenario. Ojos hendidos en $\frac{1}{4}$ de su diámetro transversal al nivel de las cavidades genales. Antenas alcanzando el primer $\frac{1}{3}$ elítral, pectinadas a partir del artejo 3º inclusive; artejo 2º muy pequeño; 3º más grueso y casi $1\frac{1}{2}$ veces más largo que el siguiente, con el apéndice sin embargo casi la mitad más corto; artejos 4-10 gradualmente algo alargados, y sobre todo atenuados, con los apéndices algo más del doble largos. Pronoto $1\frac{1}{4}$ más ancho que largo — sin contar en la longitud los ángulos látero-posteriores —, bastante abultado hacia adelante, paralelo en los costados que son además verticalmente caídos; borde anterior aparentemente semicircular — debido a la gran oblicuidad de la truncadura protoráctica —, tan avanzado así que casi oculta la cabeza por encima en reposo; disco menos desigual que en sus otros congéneres, con el surco longitudinal mediano fuerte en medio pero muy acortado por delante y por detrás, con las fosetas látero-medianas pequeñas y puntiformes, sin más accidentes apreciables; ángulos posteriores provistos de una quillita, visible por encima, más o menos entera por delante pero reconocible hasta casi la mitad de los costados; quilla látero-superior — derivada del borde anterior — breve, alcanzando solo $\frac{1}{4}$ de los costados, oblicua solo con relación a la quilla marginal límite del pronoto; ésta última un poco acortada por delante; escultura formada en principio por una fuerte y apretada puntuación umbilicada, neta así solo por los costados,

resuelta en granulosidad variable y mate por toda la superficie del disco, menuda hacia el borde anterior, gruesa y casi áspera hacia la base. Elytros paralelos hasta la mediación, atenuado-arqueados hacia la extremidad, subcilíndricos, ligeramente comprimidos por el ápice, con la base declive entre las 3 primeras estrías de cada lado, deprimida luego hacia los hombros, de suerte que parece gibosa alrededor del escudete; estrías aparentes pero finas y poco profundas, con menudos puntos espaciados no desbordándolas; interestrías en general planas, esculpidas por densos puntos simples más

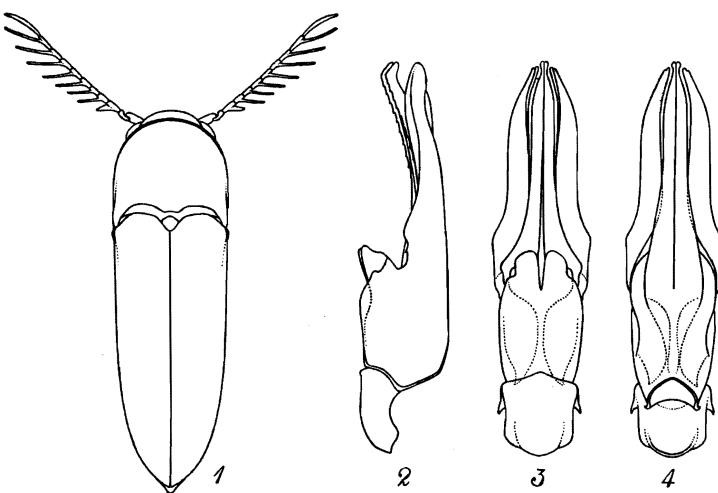


FIG. 1-4. — *Prodirrhagus straeleni* n. sp.

1 : Silueta del edeago; 2 : Vista lateral; 3 : Vista ventral; 4 : Vista dorsal.

o menos biseriados y aún triseriados al principio, determinando entre ellos algunas arruguitas transversas, y hacia el ápice resueltos en granulitos ásperos, casi en dientecitos muy visibles sobre todo por los costados. Depresiones antenarias prosternales solo indicadas, poco profundas y lisas en el $\frac{1}{3}$ anterior. Metacoxas poco más dilatadas, y arqueadamente, del lado interno que del externo. Esterñito apical terminado en una punta muy breve y ligeramente levantada. Genitalia ♂ (fig., 3-4).

Kaswabilenga, 700 m alt., 23-24.X.1947, 1 individuo (holotipo de la especie).

Especie dedicada a M. V. VAN STRAELEN. Es la tercera que se conoce del género *Prodirrhagus*, pudiendo diferenciarse fácilmente de sus congéneres mediante la siguiente clave.

- 1 (4) Escultura de las interestriás formada por gruesos puntos simples, en su mayor parte biseriados; fondo brillante, por ser alisados todos los interespacios de la puntuación. Pilosidad amarillenta, sobre los élitros uniforme. Antenas de los ♂♂ pectinadas. Base del epístoma casi doble ancha que el espacio suprantenario.
- 2 (3) Antenas del ♂ pectinadas desde el artejo 3º inclusive. Incisión ocular de $\frac{1}{6}$ del diámetro transverso de los ojos. Escudete casi transverso. Escultura protoráctica en gránulos por el centro del disco. Surco longitudinal mediano del pronoto breve, acortado por delante y por detrás. Surcos antenarios prosternales alcanzando solo $\frac{1}{3}$ protoráctico. Quillas látero-submarginales del pronoto iniciadas un poco por debajo del vértice ocular. *P. straeleni* nov. sp.
- 3 (2) Antenas del ♂ pectinadas desde el 4º artejo inclusive; el 3º simplemente en triángulo isósceles. Incisión ocular de $\frac{2}{5}$ del diámetro transverso de los ojos. Escudete notablemente alargado. Escultura protoráctica uniformemente formada por una puntuación muy densa. Surco longitudinal mediano del pronoto completo. Surcos antenarios prosternales alcanzando los $\frac{2}{3}$ de la longitud protoráctica. Quillas látero-submarginales del pronoto iniciadas un poco por encima del vértice ocular. *P. dubius* FLEUTIAUX.
- 4 (1) Escultura de las interestriás formada por una menuda, profunda y apretada puntuación no seriada que confiere al fondo elítral un aspecto coriáceo y mate. Pilosidad blanco-grisácea; en los $\frac{2}{3}$ anteriores de los élitros leonada, de suerte que la parte posterior de los mismos queda muy contrastada por el color claro y mayor densidad de los pelos. Antenas de los ♂♂ aserradas. Base del epístoma tan ancha como el espacio suprantenario. *P. africanus* SCHWARZ.

THROSCIDAE.

Lissomus subpubescens BONVOULOIR.

Gorges de la Pelenge, 1.150 m alt., 21-23.VI.1947, 8 individuos
 Kilwezi, 750 m alt., 23.VIII-4.IX.1948, 1 individuo.
 Munoi, bif. Lupiala, 890 m alt., 12-14.VI.1948, 1 individuo.

Especie descrita del Gabón y conocida ya de numerosas localidades del Congo y Guinea española (Ann. Mus. R. Afr. Centr., 1960). Es probablemente un elemento típico guineo-congolés.

Aulonothroscus diabolicus COBOS.

Route vers Shinkulu, 1.450 m alt., 14.V.1948, 1 individuo.

Especie recientemente descrita sobre numerosa serie de ejemplares procedentes de diversas localidades congolesas y de Tangañica.

Aulonothroscus trixagooides FLEUTIAUX.

Buye-Bala, affl. g. Muye, affl. dr. Lufira, 1.750 m alt., 14.IV.1948, 2 individuos.
Lusinga, 1.760 m alt., 22.IV.1949, 1 individuo.

Especie discrita de Tangañica y citada por mí ha poco de diversas estaciones congolesas.

INSTITUTO DE ACLIMATACIÓN (ALMERÍA).

ÍNDICE ALFABÉTICO.

Empresa llevada a cabo el 30 de setembro de 1961.

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Fascicule 63 (2)

**CASSIDINAE ⁽¹⁾
(COLEOPTERA CHRYSOMELIDAE)**

BY

STANLEY SHAW (Coventry)

This interesting collection of 56 species includes one new genus and species and 6 new species. Many of the species are well known Central African species, as is to be expected in a large collection such as this one, but, 8 species are included which have not previously been recorded from the Congo.

I would like to express my thanks to Dr. J. MARAN, Head of the Department of Entomology, Narodni Museum, Prague, and to Dr. W. D. HINCKS, Keeper of the Department of Entomology Manchester Museum, for the loan of material during the preparation of this paper.

Notosacantha collarti (SPAETH).

Hoplionota collarti SPAETH, 1931, Rev. Zool. Bot. Afr., **21** : 103 (Belgian Congo : Mayumbe, Seke-Bauza); SPAETH, 1934, loc. cit., **24** : 380.

Lusinga (riv. Dipidi), 12.VI.1945, 1 spn.

A little known species which has only been recorded from the Congo.

Notosacantha junodi (SPAETH).

Hoplionota junodi SPAETH, 1913, Verh. zool. bot. Ges. Wien, **63** : 481 (Natal : Shilouvaine) (Mashonaland and Port Natal).

Kaswabilenga (rive dr. Lufira, 700 m), 22-26.X.1947, 1 spn.

This single specimen agrees with the type in general form, differing only in the size and shape of the principle tubercle which is longer and

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more acute. *N. junodi* has previously only been recorded from South Africa, Southern Rhodesia and Nyasaland so that the present record increases the range of distribution of this apparently rare species.

Notosacantha schoutedeni (SPAETH).

Hoplionota Schoutedeni SPAETH, 1913, Revue Zoologique Africaine, **2** : 472 (Elisabethville).

Kankunda (1.300 m), 19-24.XI.1947, 1 spn., 16-19.IX.1947, 1 spn.; Munoi, bif. Lupiala (890 m), 12-14.VI.1948, 1 spn.; Munoi, bif. Lupiala, affl. dr. Lufira (890 m), 6-15.VI.1948, 1 spn.

A little known species which has only been noted from the south of the Congo.

Notosacantha vogeli (WEISE).

Hoplionota Vogeli WEISE, 1903, Arch. Naturgesch., **69** : 220 (« Deutsch-Ostafrika »).

Kaswabilenga (700 m), 4.XI.1947, 1 spn.

This single specimen constitutes the first record for this species from a locality outside Tanganyika.

Notosacantha wellmani (WEISE).

Hoplionota Wellmani WEISE, 1908, Stett. Ent. Zeit., **69** : 203 (Angola).

Kabwekanono (1.815 m), 6.III.1948, 1 spn.; Kafwe (Grande), affl. dr. Lufwa et s.-affl. dr. Lufira (1.780 m), 5.III.1948, 1 spn.

This species has been recorded from the Cameroons and Angola and eastwards from the South Congo and Rhodesia.

Aspidomorpha areata (KLUG).

Cassida areata KLUG, 1835, Erman's Reise, Ins., 48.

Aspidomorpha areata (KLUG) SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-12), **18** : 290; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43(9)** : 50; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 231.

Mabwe (585 m), 9.XI.1948, 1 spn., 17.XI.1948, 1 spn.

A well known species which has a wide distribution in Africa, having been recorded from Cape Province, eastwards and north to Ethiopia and also from the Congo.

Aspidomorpha confinis (KLUG).

Cassida confinis KLUG, 1835, Erman's Reise, Ins., 47.

Aspidomorpha confinis (KLUG) SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. 43(9) : 51; SHAW, 1955, Ann. Mus. Congo Belge, Zool., 40 : 233.

Riv. Bowa, affl. dr. Kalule-Nord, près Kiamalwa, 1-3.III.1949, 1 spn.; Kanonga (700 m), 16-23.II.1949, 1 spn.; riv. Karibwe (affl. Lusinga, 1.760 m), 16.IV.1947, 1 spn.; Kaziba (1.140 m), 19.II.1948, 1 spn., 1-6.II.1948, 1 spn., 24.II.1948, 3 spns.; Kaziba, affl. g. Senza, s.-affl. dr. Lufira (1.140 m), 10-14.II.1948, 3 spns.; Lusinga (1.760 m), 1-17.XII.1947, 8 spns.; Lusinga (riv. Lusinga), 9-14.VI.1945, 1 spn.; Lusinga (Kabwekanono), 31.V.1945, 1 spn.; Mabwe (585 m), 3-6.I.1949, 1 spn.; [Kiamakoto-Kiwakishi (1.070 m)], 4-16.X.1948, 1 spn.

A common species recorded from West Africa eastwards as far as Tanganyika.

Aspidomorpha delitescens WEISE.

Aspidomorpha delitescens WEISE, 1903, Arch. Naturgesch., 69 (1) : 222 (Angola : Benguela).

Kankunda (1.300 m), 19-24.XI.1947, 2 spns.; riv. Kateke, s.-affl. Lufira (960 m), 23.XI.1947, 1 spn., 5.XII.1947, 1 spn.; Lusinga (1.760 m), 8.IV.1947, 1 spn.; riv. Lusinga (1.760 m), 26.IV.1947, 1 spn.; Mukana (1.810 m), 4.VII.1947, 1 spn., 15-19.I.1948, 3 spns.; Munoi, bif. Lupiala (890 m), 31.V.1948, 1 spn., 2.VI.1948, 2 spns.

Recorded from Angola to inner East Africa.

Aspidomorpha diaphana (SAHLBERG).

Cassida diaphana SAHLBERG, 1823, Spec. Ins., 58 (West-Africa).

Kabwe, sur rive dr. Muye, affl. dr. Lufira (1.320 m), 13-14.V.1948, 1 spn.; Kaswabilenga (700 m), 4.XI.1947, 1 spn.; riv. Lupiala, 30.VI.1945, 1 spn.; gorges de la Pelenge (1.150 m), 6-23.VI.1947, 8 spns.

A West and Central African species.

Aspidomorpha dilecta BOHEMAN ab. *fragilis* WEISE.

Aspidomorpha fragilis WEISE, 1899, Arch. Naturgesch., 65 (1) : 257 (Zambezi).

Lusinga (1.760 m), 15.IV.1947, 1 spn.

This species has previously only been recorded from South-Africa and Tanganyika.

Aspidomorpha fusca n. sp.

(Fig. 1.)

Colour : Light brown or brown with sections of the elytral striae more noticeable due to darker pigmentation; the two apical antennal segments are black; marginalia absent.

Pronotum slightly more than twice as broad as long, the front margin curves in a shallow arc towards the hind margin, side margins nearly obsolete. Elytra with feebly punctured striae, a strong rounded impression between and including striae three and four is situated just within the basal third of the disc; explanate side-margins broad, as wide as the disc at the widest point behind the shoulder, narrowing to slightly less than

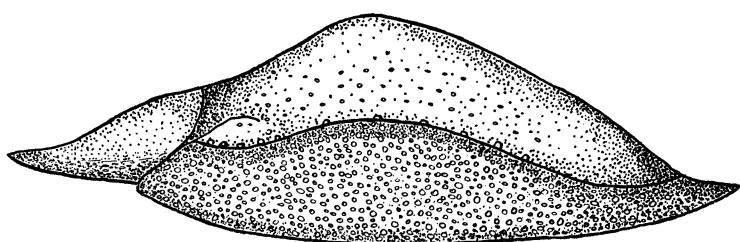


FIG. 1. — *Aspidomorpha fusca* n. sp.,
profile view.

one third of this width at the apex; anterior angles of elytra weakly rounded, slightly wider than base of pronotum. In profile the pronotum and elytra form an almost even curve, the rounded elytral umbo being nearly central. Size 10×9 mm.

Type : Ganza, pr. riv. Kamandula, affl. dr. Lukoka (860 m), 27.VI-6.VII.1949.

Paratypes : rég. riv. Luanana, piste Pelenge-Lufira (1.400 m), 13.XI.1947, 2 spns. (1 specimen in the SPAETH Collection, Manchester Museum).

This species, when examined from above, is very similar in outline to *A. indistincta* BOHEMAN (BOHEMAN, 1854, Mon. Cassid., 2 : 248) although *A. fusca* is far more rounded in the apical third. In profile, the contour of *A. fusca* is far more rounded and higher than that of *A. indistincta*. The antennae of *A. indistincta* differ from *A. fusca* in having only the ultimate segment dark.

Aspidomorpha icterica BOHEMAN.

Aspidomorpha icterica BOHEMAN, 1854, Mon. Cassid., **2** : 306 (« Caffraria »); SPAETH, 1932, Rev. Zool. Bot. Afr., **22** (1) : 12; SPAETH, 1943, in Parc National Albert. I. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 52; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 234.

Riv. Bowa, affl. dr. Kalule-N., près Kiamalwa, 1-3.III.1949, 2 spns.; Buye-Bala (1.750 m), 25-31.III.1948, 2 spns.; Kabwe (rive E. lac Upemba) (585 m), 11-26.I.1949, 1 spn.; Kabwekanono (1.815 m), 6-9.III.1948, 1 spn., 3-9.VII.1947, 1 spn.; Kabwekanono, rég. Lusinga (1.815 m), 25.IV.1949, 1 spn.; Kalumengongo (tête de source), affl. dr. Lualaba (1.830 m), 21.I.1948, 1 spn.; Kalumengongo (1.800 m), 18.IV.1947, 1 spn.; Kamitungulu, affl. Lusinga (1.700 m), 4-7.III.1947, 2 spns.; Lubanga, affl. dr. Senza (affl. dr. Lufira) (1.750 m), 5.IV.1948, 1 spn.; Lusinga (1.760 m), 22.X.1948, 2 spns., 1-17.XII.1947, 11 spns., 12-15.IV.1947, 1 spn., 12-18.VII.1947, 2 spns., 4.VI.1947, 1 spn., 28.XI.1947, 1 spn.; Lusinga (riv. Dipidi), 12-15.VI.1945, 2 spns.; Mabwe (585 m), 21-28.I.1949, 1 spn.; Mabwe (lac Upemba) (585 m), 1-8.IX.1947, 2 spns., 18-27.VIII.1947, 3 spns., 1.XII.1947, 1 spn.; Mabwe (rive E. lac Upemba), 11-26.I.1949, 1 spn., 17-31.XII.1948, 1 spn.; Mukana (1.810 m), 15-19.I.1948, 1 spn.; gorges de la Pelenge (1.150 m), 6-14.VI.1947, 5 spns.; [riv. Dipidi (1.700 m)], 22.IV.1947, 3 spns., 10.I.1948, 4 spns.; [Kenia, affl. dr. Lusinga (1.585 m)], 19.XII.1947, 1 spn.

A common species known from South, Central and West Africa. Two specimens, one from Kabwekanono and one from Lusinga are the *ab. burgeoni* SPAETH.

Aspidomorpha intricata WEISE.

Aspidomorpha intricata WEISE, 1903, Arch. Naturgesch., **69** (1) : 222 (Victoria Nyanza).

Ganza, pr. riv. Kamandula, affl. dr. Lukoka (850 m), 4-6.XII.1949, 1 spn.; Kabwe-sur-Muye (1.320 m), 12-14.V.1948, 1 spn.; Kankunda (1.300 m), 19-24.XI.1947, 1 spn.; riv. Mubale (1.480 m), 1-20.V.1947, 1 spn.; Mukana (1.810 m), 15-19.I.1948, 1 spn.; gorges de la Pelenge (1.150 m), 6-10.VI.1947, 1 spn.

Records for this species have been noted from East Africa and the southern region of the Congo.

Aspidomorpha longifrons n. sp.

(Figs. 2, 4.)

Colour : Antennae with the five apical segments black; pronotum yellow; the elytral pattern of black markings appears to be complete when represented as in the specimen illustrated (fig. 2) although many specimens in the present series show a decrease in dark pattern, the extremes being entirely yellow or with small markings at the base on either side of the scutellum, also, the lighter specimens lack subapical marginalia; the colour of the underside is variable, pale specimens have only the coxae and tro-

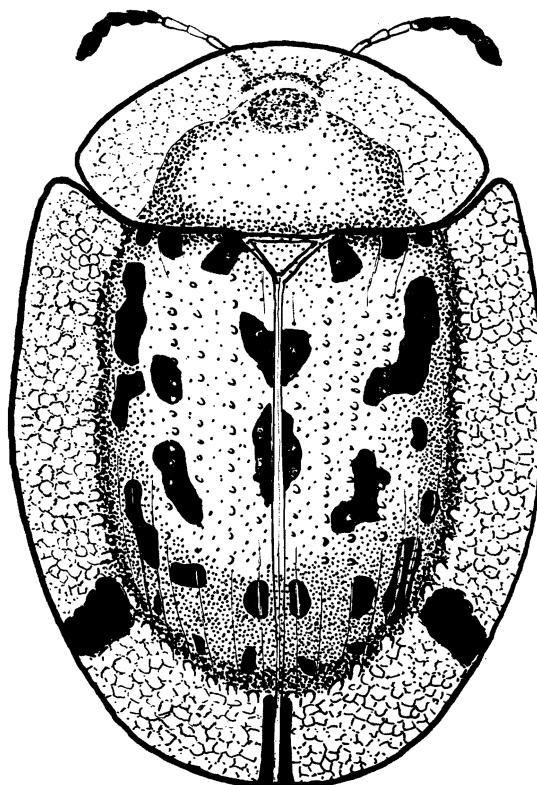


FIG. 2. — *Aspidomorpha longifrons* n. sp.,
dorsal view.

chanters dark although most of the series have the basal half of the femora black and the central portion of the pro-, meso-, and metasternum and the abdomen dark with the sides yellow.

Head with face, between antennae and labium (fig. 4), slightly longer than broad, the impressed lines at the side of the eyes gradually converge to below the antennae; pronotum with the front margin forming a shallow arc towards the obtuse side angles, disc with extremely fine and diffuse puncturation; elytra with strongly angled side margins, shoulder angles bluntly produced forward as far as the side angles of the pronotum, striae on disc clearly and regularly punctured; general shape oblong-ovate, elytra in profile almost flat for the basal two thirds and rather steeply inclined toward the apex. Length : 6,5 to 8 mm.

Type : Lusinga (1.760 m), 4.VI-12.VII.1947.

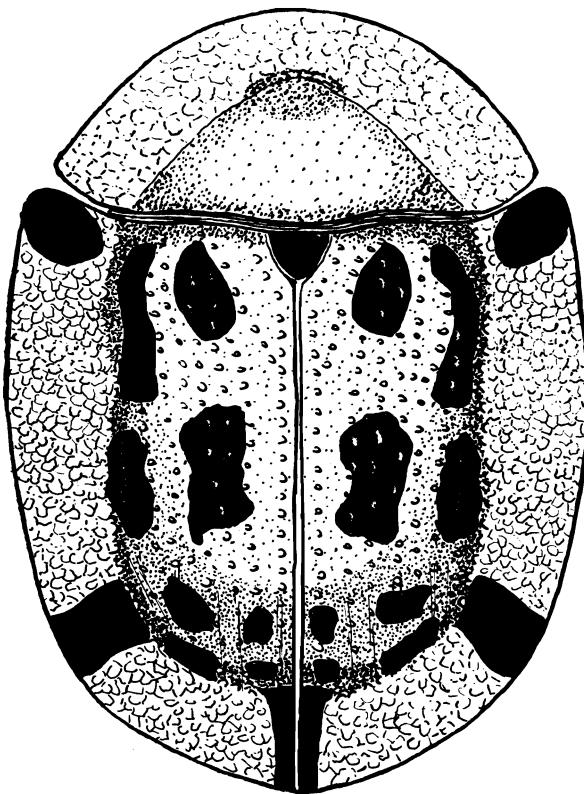


FIG. 3. — *Aspidomorpha nigripes* SPAETH,
dorsal view.

Paratypes: Buye-Bala (1.750 m), 24-31.III.1948, 11 spns. [1 spn. in the SPAETH Coll., Manchester; 1 spn. in the British Museum (Nat. Hist.); 1 spn. in the Narodni Museum, Prague], 25-26.III.1948, 10 spns. (2 spns. in the British Museum; 2 spns. in the SPAETH Coll.; 1 spn. in the Narodni Museum; 1 spn. in the SHAW Coll.); Lusinga (1.760 m), 4.VI-12.VII.1947, 5 spns. (1 spn. in the SPAETH Coll.; 1 spn. in the Narodni Museum; 1 spn. in the SHAW Coll.), 16-17.VII.1947, 1 spn. (SPAETH Coll.); Mukana (1.870 m), 15-19.I.1948, 1 spn.; Mukelengia, affl. Kalumengongo (1.750 m), 12.IV.1948, 4 spns. (1 spn. in British Museum; 1 spn. in SHAW Coll.); Muye, tête de source (1.630 m), 6.IV.1948, 2 spns.

Other material: Buye-Bala (1.750 m), 24-31.III.1948, 41 spns., 25-26.III.1948, 28 spns. (2 spns. in SHAW Coll.); gorges de la Pelenge (1.150 m), 19.VI.1947, 1 spn.; riv. Kamitungulu, affl. Lusinga (1.700 m), 4-7.II.1947, 1 spn.; Lusinga (1.760 m), 4.VI-12.VII.1947, 2 spns.; Lusinga (riv. Kamitungulu), 13.VI.1945, 1 spn.; Mukelengia, affl. Kalumengongo (1.750 m), 12.IV.1948, 4 spns.; Muye, tête de source (1.630 m), 6.IV.1948, 1 spn. (SHAW Coll.).

According to the arrangement in SPAETH's key to the related groups of the African species belonging to the genus *Aspidomorpha* [1932, Rev. Zool. Bot. Afr., 22 (1)], *A. longifrons* belongs to group 5 with, apparently, the nearest ally being *A. nigripes* SPAETH (1928, SBÖRNIK, 4 : 84) described from an unique specimen from Benguela, Dongo.

Through the kindness of Dr. J. MARAN, the Narodni Museum Prague, I have been able to examine the type of *A. nigripes* and have thought it useful to make a drawing of this little known species (fig. 3). It differs from *A. longifrons* structurally in the shape of the face (fig. 5) which is shorter, also the facial lines converge quite strongly below the antennae.

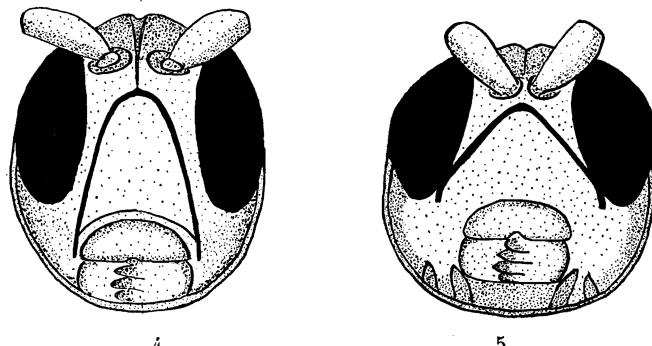


FIG. 4. — *Aspidomorpha longifrons* n. sp.,
head, showing face between the eyes (left).

FIG. 5. — *Aspidomorpha nigripes*,
head, showing face between the eyes (right).

The pronotal angles of *A. nigripes* are less obtuse and the anterior angles of the elytra are more rounded and slightly less produced than those of *A. longifrons*. The dark marks on the elytra of *A. nigripes* form a well defined pattern with no basal markings and the scutellum is black, humeral marginalia are present. The underside colouration of *A. nigripes* differs from that of *A. longifrons* in having the body entirely yellow except for the legs which are pitchy black and the head which is fuscous; the basal antennal segment is almost black with the next segment much lighter, the following segments become progressively darker towards the black club.

A. nigromaculata (HERBST) [1799, *Natursyst. Käfer*, 8 : 277; t. 133, f. 8 (Sierra Leone)] has a similar colour pattern to that of some of the colour varieties of *A. longifrons* but the following characters possessed by *A. nigromaculata* serve to separate the two species : pronotal angles more rounded;

elytral side margins less strongly angled with disc, narrower especially towards apex, shoulder angles less strongly drawn forward; face shorter and broader.

Aspidomorpha mutata BOHEMAN.

Aspidomorpha mutata BOHEMAN, 1854, Mon. Cassid., **2** : 311 (Sierra Leone : Guinea); SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 289; SPAETH, 1934, Rev. Zool. Bot. Afr., **24** : 383; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 51; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 234.

Gorges de la Pelenge (1.150 m), 6-10.VI.1947, 2 spns.

A. mutata BOHEMAN has been recorded from West Africa eastwards to Lake Tanganyika. One specimen appears to be immature, the anterior marginalia do not quite reach the side margin, and only the apical antennal segment is black whereas the typical form has the last two apical segments dark. One specimen in the SPAETH Coll. (Manchester) is labelled *mutata* ab. (Kunungu, N'kele) and also has only the apical antennal segment black.

Aspidomorpha nigromaculata (HERBST).

Cassida nigromaculata HERBST, 1799, Natursyst. Käfer, **8** : 277; t. 133, f. 8 (Sierra Leone).

Aspidomorpha nigromaculata (HERBST) SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 290; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 50; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 234.

Mabwe, lac Upemba (585 m), 1-21.VII.1947, 6 spns., 9.IX.1947, 1 spn., 1.XII.1947, 4 spns.

This species apparently has a northern distribution, having been recorded from Ethiopia, Central and West Africa.

Aspidomorpha pallescens SPAETH.

Aspidomorpha pallescens SPAETH, 1917, Ann. hist. nat. Mus. hung., **15** : 422 (Benguela and East Belgian Congo).

Mukana (1.810 m), 15-19.I.1948, 4 spns.

The present distribution of this species is from Angola to the eastern regions of the Congo.

Aspidomorpha potens WEISE.

Aspidomorpha potens WEISE, 1903, Arch. Naturgesch., **69** : 223 (Unyanembe).

Lusinga (1.760 m), 4.VI.1947, 1 spn., 12.VII.1947, 1 spn.; riv. Mubale (1.480 m), 6-10.V.1947, 1 spn.; Mukana (1.810 m), 15-19.I.1948, 25 spns.

The present records extend the range of distribution of this species in a westward direction. Hitherto, *A. potens* WEISE has only been noted from Tanganyika.

Aspidomorpha quadriramosa BOHEMAN.

Aspidomorpha quadriramosa BOHEMAN, 1854, Mon. Cassid., **2** : 305 (Guinea); SPAETH, 1932, Rev. Zool. Bot. Afr., **22** (1) : 10.

Kaziba, 1-27.II.1948, 15 spns.; Kaziba, affl. g. Senze (affl. dr. Lufira) (1.140 m), 4-26.II.1948, 35 spns.; Lusinga (1.760 m), 8.IV.1947, 1 spn., 18.VII.1947, 2 spns.; riv. Lupiala (890 m), 21.IV.1947, 3 spns.

A. quadriramosa BOHEMAN has been recorded from West Africa and the Congo. Three specimens of this series (riv. Lupiala) are the ab. *congoana* SPAETH. The other specimens resemble the ab. *congoana* but whereas Spaeth's aberration has four elytral marginalia the present series has only two anterior marginalia.

Aspidomorpha scalena SPAETH.

Aspidomorpha (Spaethia) scalena SPAETH, 1917, Ann. hist. nat. Mus. hung., **15** : 428 (S. E. Belgian Congo : Elisabethville, Kapiri).

Lusinga (1.760 m), 10.IV.1947, 1 spn.

A little known species which so far has only been recorded from the south-east of the Congo.

Aspidomorpha siticulososa SPAETH.

Aspidomorpha (Spaethia) siticulososa SPAETH, 1917, Ann. hist-nat. Mus. hung., **15** : 428 (Belgian Congo : Kasenga).

Mabwe (lac Upemba) (585 m), 1-20.VIII.1947, 7 spns., 1-8.IX.1947, 2 spns.; Mabwe (rive E. lac Upemba) (585 m), 28.XI.1948, 1 spn.

This species has so far only been recorded from the south-east of the Congo.

Aspidomorpha splendidula (SPAETH M. S.) n. sp.

(Fig. 6.)

Colour : Brown, the elytra with well marked rufous humeral and subapical marginalia, the rufescent colouration extends along the sides of the disc and also along the suture with obscure flecks on the disc. Antennae with the apical segment black or, as in the paratype, with the apical two thirds of segment ten black and segment eleven black with the apex infuscate.

Pronotum twice as broad as long, front margin evenly curved to the rounded hind angles. Elytra with the rounded front angles wider than pronotum, explanate side margin wide, wider than the disc at its widest

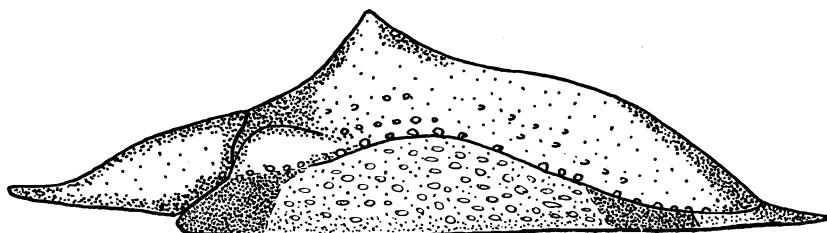


FIG. 6. — *Aspidomorpha splendidula* (SPAETH M. S.) n. sp.,
profile view.

point behind the shoulder, reducing to slightly less than half its maximum width at the apex; discal striae incomplete, very feebly punctured. In profile the prominent umbo rises sharply, both anteriorly and posteriorly, to the sharp angled apex. Size : type, 8×7 mm; paratype, $8,5 \times 7,5$ mm.

Type : Kapira, Katanga (SPAETH Coll., Manchester Museum).

Paratype : Kankunda (1.300 m), 22-24.XI.1947.

It is very difficult to distinguish this species from the Madagascan species *A. vernicata* FAIRMAIRE (1901, Rev. d'Ent., 22 : 246) other than by the apparent geographic isolation. *A. vernicata* is a smaller species ($7,5 \times 7,5$ mm) and has a slightly less prominent umbo. Also, on present evidence, the Madagascan species differs from *A. splendidula* by having the apical two antennal segments entirely black.

Aspidomorpha sternalis WEISE.

Aspidomorpha sternalis WEISE, 1896, Dtsch. ent. Z., **1896** : 20 (East Africa); SPAETH, 1932, Rev. Zool. Bot. Afr., **22** (1) : 7.

Mukana (1.810 m), 15-19.I.1948, 8 spns.

This species is known from Angola, the south-east of the Congo and East Africa.

Aspidomorpha strigosa (GORHAM).

Cassida strigosa GORHAM, 1892, Proc. Zool. Soc. Lond., 95 (Aruwimi Valley).

Aspidomorpha strigosa (GORHAM) SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 281; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 50.

Buye-Bala (1.750 m), 25-31.III.1948, 3 spns.; Kalumengongo (tête de s.-affl. dr. Lualaba) (1.830 m), 21.I.1948, 1 spn.; Kalumengongo (1.780 m), 21.I.1948, 1 spn.; riv. Karibwe (affl. Lusinga) (1.760 m), 16.IV.1947, 1 spn.; Kaziba (1.140 m), 1-6.II.1948, 1 spn.; Lusinga (1.760 m), 1-17.XII.1947, 12 spns., 11-18.VII.1947, 4 spns., 1-15.IV.1947, 4 spns., 22.X.1947, 1 spn.; Mubale (1.480 m), 4-16.V.1947, 1 spn.; Mabwe (lac Upemba (585 m), 18-27.VIII.1947, 1 spn.; Mukana (1.810 m), 15-19.I.1948, 2 spns.; Mukelengia, affl. Kalumengongo (1.750 m), 12.IV.1948, 6 spns.; [Klamakoto-Kiwakishi (1.070 m)], 4-16.X.1948, 1 spn.

An East and Central African species.

Aspidomorpha submutata WEISE.

Aspidomorpha submutata WEISE, 1896, Arch. Naturgesch., **65** (1) : 256 (East Africa); SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 289; SPAETH, 1934, Rev. Zool. Bot. Afr., **24** : 383.

Kaziba, affl. g. Senze S. (affl. dr. Lufira) (1.140 m), 18-26.II.1948, 1 spn.; Kaziba (1.140 m), 15.II.1948, 1 spn.; Munoi, bif. Lupiala, affl. dr. Lufira (890 m), 6-21.VI.1948, 3 spns.; Mukana (1.810 m), 15-19.I.1948, 1 spn.; Mukana, Lusinga (1.810 m), 15-19.I.1948, 1 spn.

An East, Central and West African species.

Aspidomorpha togata THOMSON.

Aspidomorpha togata THOMSON, 1858, Arch. Ent., **2** : 227 (Old Calabar); SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 235.

Kabwe-sur-Muye, affl. dr. Lufira (1.320 m), 26.IV.1948, 1 spn., 5-25.V.1948, 3 spns.; gorges de la Pelenge (1.150 m), 10-14.VI.1947, 4 spns.

Recorded from West and Central Africa.

Aspidomorpha virens n. sp.

(Fig. 7.)

Colour : Upperside shining green, underside brown with the central portion of the mesosternum, metasternum and abdomen broadly marked with black. The face of the type specimen is greenish in colour and the antennae have the basal two segments greenish-brown with the following four segments pitchy and the five apical segments black. The paratype is probably immature as the face is light brown and the antennae have five brown basal segments with the apical four segments pitchy.

Pronotum slightly less than twice as broad as long, sides broadly rounded. Elytra with narrow lightly impressed punctured striae, interstices on disc broad and smooth; sides parallel for almost two thirds the length, gradually rounded towards the apex; side margins rounded at the shoulder angles, angled with the disc and diminishing towards the apex where they become obsolete. Face broader than long, slightly raised between two impressed lines which converge from the base of the eyes to meet between the antennae. The third antennal segment is equal in length to the fourth segment. Tarsal claws with small comb teeth only on the inner side of the tooth. Size : type, $5,4 \times 4$ mm; paratype $5 \times 3,6$ mm.

Type : Monts Kabulumba (987 m), entre Mabwe et la Lufira, 27-28.I.1949.

Paratype : Mabwe (rive E. lac Upemba) (585 m), 20-26.I.1949 (SPAETH Coll., Manchester Museum).

The small comb teeth on the tarsal claws are very similar to those of *A. areata* (KLUG) indicating that *A. virens* belongs to the group in the genus which has comb teeth only on the inner claw. This species appears to be most closely allied to *A. areata* (KLUG) and its general shape is not unlike that of *A. areata* ssp. *egregiata* SHAW (1955, Ann. Mus. Congo Belge, Zool., 40 : 232), although the rounded angles of the pronotum and elytra at the shoulder easily distinguish *A. virens* from this species.

Aspidomorpha (Megaspidomorpha) puncicosta BOHEMAN.

Aspidomorpha puncicosta BOHEMAN, 1854, Mon. Cassid., 2 : 246 (« Caffra-ria »); SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), 18 : 280.

Kabwekanono (1.815 m), 3-9.VII.1947, 1 spn.; Kankunda (1.300 m), 13-19.XI.1947, 1 spn.; Kaswabilenga (700 m), 3-4.XI.1947, 1 spn.; Mabwe (lac Upemba) (585 m), 1-12.VIII.1947, 2 spns.; Mukana (1.810 m), 15-19.I.1948, 11 spns.; gorges de la Pelenge (1.150 m), 6-23.V.1947, 15 spns.

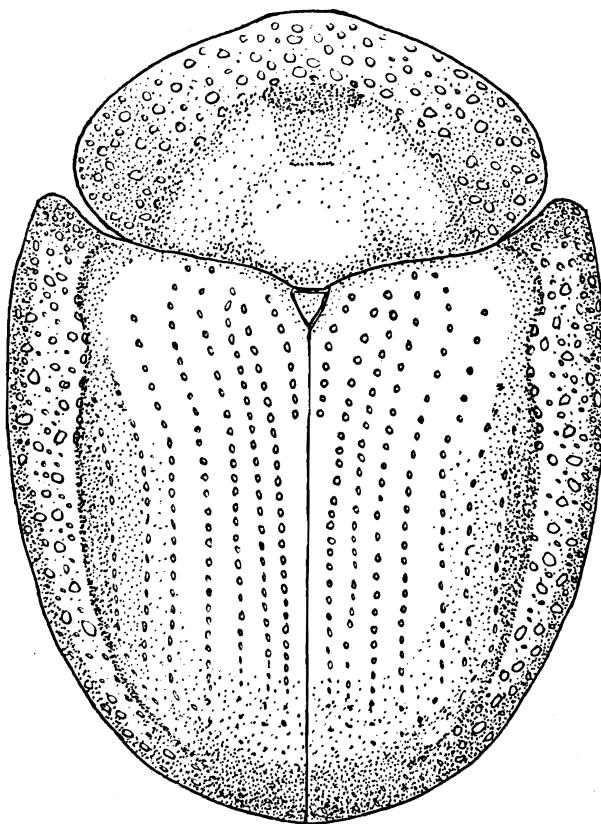


FIG. 7. -- *Aspidomorpha virens* n. sp.,
dorsal view.

A widely recorded species from Angola in the west to Zanzibar in the east and from Central and South Africa. All the above noted specimens, except for nine examples from Mukana, correspond to the ab. *propitia* SPAETH.

***Aspidomorpha (Conchylotenia) bonnyana* (GORHAM).**

Cassida bonnyana GORHAM, 1892, Proc. Zool. Soc. Lond., 94 (Belgian Congo, Aruwimi Valley).

Gorges de la Pelenge (1.150 m), 6-20.VI.1947, 9 spns.; Kabwe-sur-Muye (1.320 m), 12-25.V.1948, 2 spns.

A Central and East African species.

Aspidomorpha (Conchyloctenia) hybrida (BOHEMAN).

Cassida hybrida BOHEMAN, 1854, Mon. Cassid., **2** : 338 (Cape of Good Hope and Caffraria).

Aspidomorpha (C.) hybrida (BOHEMAN) SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 297; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte, 1933-1935, fasc. **43** (9) : 53; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 235.

Lusinga (Mukana), 20-21.VI.1945, 1 spn.; Mabwe, lac Upemba (585 m), 21-23.VIII.1947, 1 spn.; Mukana (1.810 m), 15-19.I.1948, 15 spns.

A common species in Africa, recorded from Natal in the south and Eritrea in the north as well as from East and Central Africa.

Aspidomorpha (Conchyloctenia) mouffleti (BOHEMAN).

Cassida mouffleti BOHEMAN, 1854, Mon. Cassid., **2** : 346 (Gabon).

Aspidomorpha (C.) mouffleti (BOHEMAN) SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 235.

Kaswabilenga (700 m), 18-23.IX.1947, 1 spn.; Kaziba (1.140 m), 7-27.II.1948, 6 spns.; Kaziba, affl. g. Senze, s.-affl. dr. Lufira (1.140 m), 8-14.II.1948, 3 spns.; Mukana (1.820 m), 15-19.I.1948, 1 spn.; gorges de la Pelenge (1.150 m), 21-31.V.1947, 3 spns., 6-20.VI.1947, 4 spns.

A West and Central African species.

Aspidomorpha (Conchyloctenia) multimaculata SPAETH.

Aspidomorpha (Conchyloctenia) multimaculata SPAETH, 1917, Ann. Mus. nat. hung., **15** : 480 (Angola).

Kamitungulu, affl. Lusinga (1.700 m), 4-7.III.1947, 1 spn.; Kankunda (1.300 m), 19-24.XI.1947, 1 spn.; Lusinga (1.760 m), 4-19.III.1947, 2 spns., 6-18.VII.1947, 4 spns.; Mubale (1.480 m), 6-16.V.1947, 7 spns.

This species has only been recorded from Angola and the southern region of the Congo.

Aspidomorpha (Conchyloctenia) praecox (BOHEMAN).

Cassida praecox BOHEMAN, 1854, Mon. Cassid., **2** : 334 (« Caffraria »).

Aspidomorpha (C.) praecox (BOHEMAN) SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 298.

Kabwekanono (1.815 m), 3-9.VII.1947, 3 spns.; Kalumengongo (1.800 m), 18.IV.1947, 3 spns.; rég. riv. Luanana, pistes Pelenge-Lufira (1.400 m), 13.XI.1947, 1 spn.; Lusinga

(1.700 m), 11-18.VII.1947, 4 spns.; Mubale (1.480 m), 10-13.V.1947, 1 spn.; Mukana (1.810 m), 15.III.1947, 1 spn.; gorges de la Pelenge (1.150 m), 21-31.V.1947, 2 spns., 6-10.VI.1947, 4 spns.

A. praecox (BOHEMAN) has previously only been recorded from South and East Africa.

Aspidomorpha (Conchyloctenia) punctata (FABRICIUS).

Cassida punctata FABRICIUS, 1789, Mant. Ins., 1 : 64.

Aspidomorpha (C.) *punctata* (FABRICIUS) SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), 18 : 298; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. 43 (9) : 53; SHAW, 1955, Ann. Mus. Congo Belge, Zool., 40 : 236.

Kabwe-sur-Muye (1.320 m), 12-15.V.1948, 2 spns.; Mabwe (585 m), 3-28.I.1949, 4 spns., 27-30.XI.1948, 3 spns., 13-16.XII.1948, 1 spn.; Mabwe (rive E. lac Upemba) (585 m), 12-31.XII.1948, 3 spns., 3-6.I.1949, 2 spns.; Munoi, bif. Lupiala (890 m), 31.V-2.VI.1948, 1 spn.; gorges de la Pelenge (1.150 m), 6-18.VI.1947, 29 spns.

A common species which has been recorded from South Africa northwards to Ethiopia and from the southern regions of the Congo. The form with the completely black elytra, ab. *luteicollis* (BOHEMAN), is represented by two specimens from Mabwe and five specimens from gorges de la Pelenge.

Laccoptera (Eulaccoptera) montivaga SPAETH.

Laccoptera montivaga SPAETH, in Sjöstedt, 1909, Kilimanjaro-Meru exp., 1 (7, 13) : 284 (Kilimanjaro); SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), 18 : 304.

Mabwe (585 m), 27-30.XI.1948, 1 spn.; Mabwe (lac Upemba) (585 m), 1-12.VIII.1947, 3 spns., 1-8.IX.1947, 1 spn.

This small series of specimens appears to belong to *L. montivaga* SPAETH which has been looked upon as being entirely East African in its distribution and has not previously been noted from the Congo.

Laccoptera (Eulaccoptera) rugicollis THOMSON.

Laccoptera rugicollis THOMSON, 1858, Arch. Ent., 2 : 233 (Gabon); SHAW, 1955, Ann. Mus. Congo Belge, Zool., 40 : 237.

Kabwe-sur-Muye, affl. dr. Lufira (1.320 m), 6-12.V.1948, 1 spn.; Kaziba (1.140 m), 1-24.II.1948, 3 spns.; Kaziba, affl. g. Senze, s.-affl. dr. Lufira (1.140 m), 4-26.II.1948, 4 spns.; Lubanga, affl. dr. Senze (affl. dr. Lufira) (1.750 m), 5.IV.1948, 1 spn.; Lusinga (1.760 m), 15.IV.1947, 1 spn.; gorges de la Pelenge (1.150 m), 6-21.VI.1947, 6 spns.

This species has been recorded from the Cameroons, Katanga and Ruanda.

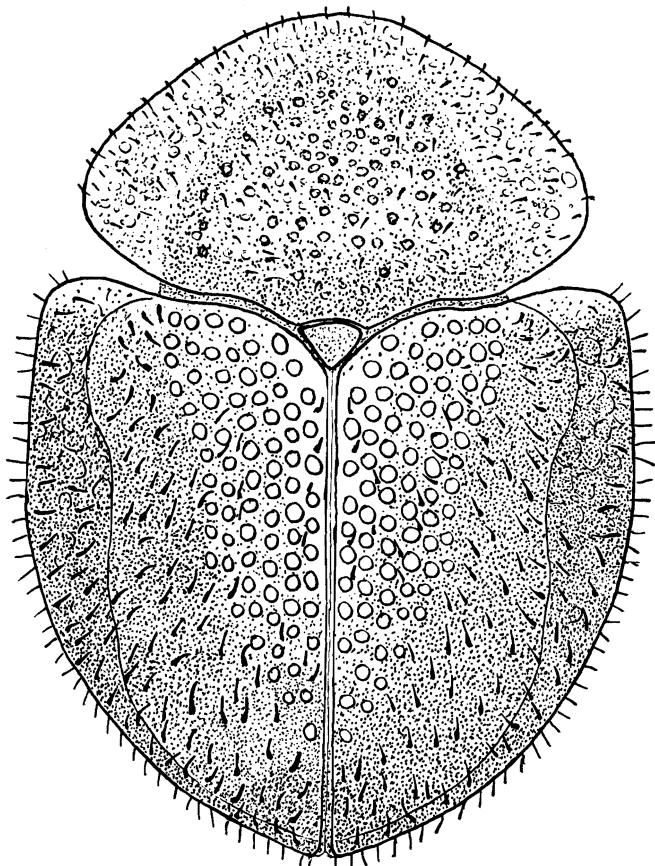


FIG. 8. — *Capillocassis hincksi* gen. et sp. n.,
dorsal view.

CAPILLOCASSIS n. gen.

Pronotum less than twice as broad as long, diffusely punctured and covered with short capitate setae. Elytra with weakly rounded shoulder angles, side margins gradually rounded towards the apex from the basal third; elytral puncturation in the form of a series of closely punctured striae, diffusely covered with strong capitate setae with a series of linear setae along the side margin. Antennae eleven segmented, with the apical five segments forming a club, each of these terminal segments with a well defined sensory pit (fig. 9). Underside, abdomen and legs sparsely

covered with short pubescence; epipleurae very wide for the basal half, narrowing in the apical half. Tarsal claws each with an exceptionally long diverging basal tooth, the claws appearing almost bifid (fig. 11).

Type : *Capillocassis hincksi* n. sp.

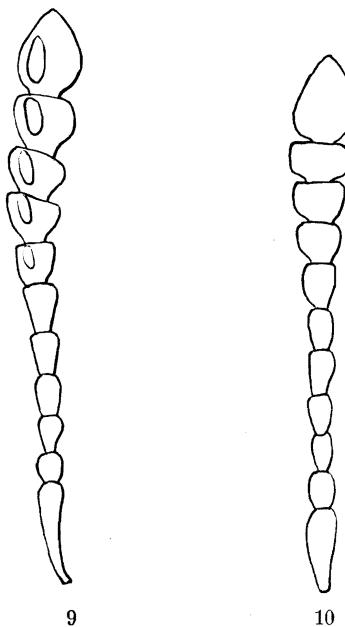


FIG. 9. — *Capillocassis hincksi* gen. et sp. n., antenna, showing sensory pits.

FIG. 10. — *Trichaspis pilosula* (BOHEMAN). antenna.

***Capillocassis hincksi* n. sp.**

(Fig. 8.)

Colour : Testaceous with white hairs and setae.

Pronotum quite strongly drawn forward in a curve at the front, side margins rounded, narrower than the elytra at the shoulders, puncturation strong and diffuse, capitate setae short. Capitate setae on elytra much longer and stronger than those on the pronotum; the closely formed striae become more strongly impressed towards the side margin where they tend to coalesce, the punctures are twice the size of those on the pronotum. The face between the eyes is diffusely punctured, labium with two punctures, one on each side of the centre. In profile the base of the elytra is almost flat, sloping fairly gradually towards the apex. Length : 3,5 mm.

Type : Kabwekanono (1.815 m), 30.IX.1948.

The new genus *Capillocassis* is related to the genus *Trichaspis* SPAETH and its subgenus *Crossocassis* SPAETH (1911, Verh. Zool. Bot. Ges. Wien, **61** : 269 and 274) but is easily separated from this genus by the presence of sensory pits on the antennal club (figs. 9, 10), the capitate hairs and the sharp diverging claw tooth (figs. 11,12). In general appearance *Capillocassis hincksi* is similar to *T. (Crossocassis) pilosa* SPAETH, although the pronotum is much less broadly rounded than that of *Trichaspis* or its subgenus.

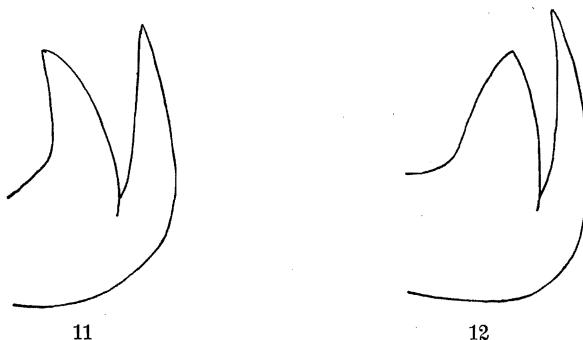


FIG. 11. — *Capillocassis hincksi* gen. et sp. n.,
tarsal claw with diverging claw tooth.

FIG. 12. — *Trichaspis pilosula* (BOHEMAN),
tarsal claw and claw tooth.

The undersides of *Trichaspis pilosula* (BOHEMAN) and *T. pilosa* SPAETH are covered with long white hairs whilst *C. hincksi* has only a sparse short pubescence.

I have pleasure in naming this species after Dr. W. D. HINCKS, the Keeper of Entomology, Manchester Museum, to whom I owe sincere thanks for his willing help and encouragement in my work.

Cassida ancorifera BOHEMAN.

Cassida ancorifera BOHEMAN, 1856, Cat. Col. Ins. Brit. Mus., **9** : 130 (Sierra Leone); SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 50.

Kamitungulu, affl. Lusinga (1.700 m), 4-7.III.1947, 2 spns.; Lusinga (1.760 m), 19.III.1947, 1 spn.; [Kenia (1.700 m)], 28.III.1947, 1 spn.

Records are known for this species from West Africa, the southern regions of the Congo, East Africa and Eritrea.

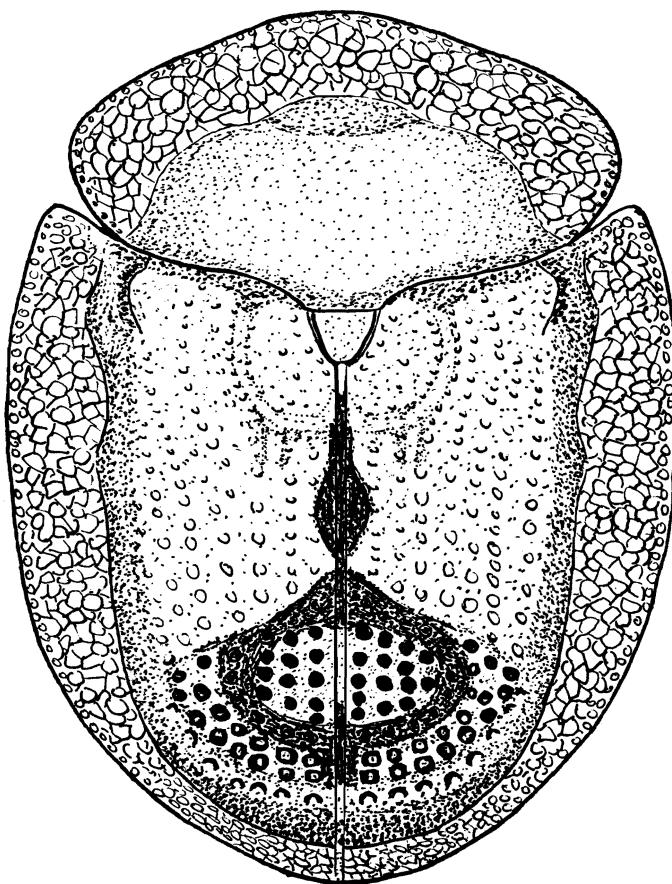


FIG. 13. — *Cassida cruenta* n. sp.,
dorsal view.

***Cassida cruenta* n. sp.**

(Fig. 13.)

Colour : Testaceous with distinctive red pigmentation in the apical third of the elytra which forms an oval centred on the suture, this red colouration is also present for a short distance behind the oval marking and in front along the suture almost as far as the scutellum; the punctures at the side and behind the oval pattern are black in colour. The labium and palpi are black; segments six and seven of the antennae are infuscate with the following terminal segments black.

Pronotum almost twice as broad as long, weakly drawn out in front with the sides strongly rounded; disc finely and diffusely punctured. Elytra

with regular clearly defined punctured striae; a swollen area along the third interstice at the base of each elytron unites at the suture a short distance behind the scutellum; explanate side margins not strongly angled with the disc, moderately wide, strongly narrowed towards the apex, front angles blunt and weakly produced forward. Profile fairly evenly rounded with an extremely slight break in outline at the point where the swollen interstice on the disc meets the suture. Length : 4,8 mm.

Type : Lufwa (1.700 m), 16.III.1948.

The distinctive colour pattern distinguishes this species from the other African members of the genus.

Cassida depicta BOHEMAN.

Cassida depicta BOHEMAN, 1862, Mon. Cassid., **4** : 315 (Old Calabar); SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 333; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 237.

Riv. Bowa, affl. dr. Kalule-Nord, près Kiamalwa, 1-3.III.1949, 1 spn.; Buye-Bala, affl. g. Muye (affl. dr. Lufira) (1.750 m), 8-16.IV.1948, 1 spn.; Buye-Bala (1.750 m), 25-31.III.1948, 1 spn., 1-7.JV.1948, 2 spns.; Ganza, pr. riv. Kamandula, affl. dr. Lukoka (860 m), 12-18.VI.1949, 1 spn.; Kabwe-sur-Muye (1.320 m), 30.IV-10.V.1948, 1 spn.; Kabwe-sur-Muye, affl. dr. Lufira (1.320 m), 6-14.V.1948, 5 spns.; Katongo (1.750 m), 1.IV.1948, 1 spn.; riv. Kaviza (affl. Lusinga) (1.700 m), 14.VII.1945, 4 spns.; Kaziba, s-affl. dr. Lufira (1.140 m), 4-26.II.1948, 10 spns.; Kaziba (1.140 m), 1-6.II.1948, 1 spn., 24.II.1948, 2 spns.; Kiamakoto, entre Masombwe-Mukana, rive dr. Lukima, affl. dr. Gr.-Kafwe (1.070 m), 20.IX.1948, 1 spn.; riv. Kilolomatembo (affl. Lusinga), 9.VII.1945, 1 spn.; riv. Kimanenko (affl. Lusinga), 18.VII.1945, 1 spn.; Lubanga, affl. Senze-S. (1.750 m), 5.IV.1948, 4 spns.; Lukawe (affl. rive dr. Lufira) (700 m), 30.IX.1947, 1 spn.; Lusinga (1.760 m), 3-18.VII.1947, 7 spns., 1-8.XII.1947, 2 spns.; riv. Lusinga, 20.VII.1945, 1 spn.; Lusinga (riv. Kamalonge), 1.VI.1945, 1 spn.; Lusinga (riv. Kamalongira), 22.VI.1945, 2 spns.; Lusinga (riv. Kamitungulu), 13.VI.1945, 1 spn.; Lusinga (galerie riv. Lusinga), 24.V.1945, 1 spn.; Lusinga (riv. Lufwa), 1.VI.1945, 4 spns.; Lusinga (près Mukana), 1.VI.1945, 1 spn.; riv. Mitoto (affl. Lusinga), 9.VII.1945, 1 spn.; Mukana, Lusinga (1.810 m), 18.III.1948, 1 spn.; gorges de la Pelenge (1.150 m), 10-14.VI.1947, 1 spn.; [Kiamakoto-Kiwakishi (1.070 m)], 4-16.VII.1945, 3 spns.

This species is known from East, Central and West Africa. The long series of specimens shows a variation in colour from light specimens to very dark examples. The light form is very similar to *C. trepidula* SPAETH [1932, Rev. Zool. Bot. Afr., **22** : (2) 239] from Rhodesia, and the status of this species requires further examination.

Cassida dorsovittata BOHEMAN.

Cassida dorsovittata BOHEMAN, 1854, Mon. Cassid., **2** : 395 (Cape of Good Hope).

Mabwe (585 m), 17-20.XI.1948, 1 spn.; Mabwe (rive E. lac Upemba) (585 m), 20-26.I.1949, 2 spns.

This species has previously been recorded from South and East Africa, Ethiopia and the Sudan. Two specimens in the Spaeth Collection (Manchester) are from the Congo.

Cassida granula BOHEMAN.

Cassida granula BOHEMAN, 1856, Cat. Col. Ins. Brit. Mus., **9** : 131 (Guinea).

Kaziba, affl. g. Senize, s-affl. dr. Lufira (1.140 m), 4-12.II.1948, 1 spn.; Mabwe (rive E. lac Upemba) (585 m), 1.III.1949, 1 spn., 12-17.XII.1948, 1 spn.

A West and Central African species.

Cassida humerosa SPAETH.

Cassida humerosa SPAETH, 1902, Ann. Soc. ent. Belg., **46** : 455 (Zambi, Chiloango); SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 61; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 237.

Buye-Bala (1.750 m), 24-31.III.1948, 1 spn.; Kanonga (675 m), 17-22.II.1949, 1 spn.; [Kiamakoto-Kiwakishi (1.070 m)], 4-16.X.1948, 1 spn.

A Central African species. The present series of three specimens show distinct rows of setae on the elytra which are not mentioned by SPAETH in his original description. It is possible that SPAETH's series of specimens consists of rubbed examples as the present specimens do not seem to differ in any other character.

Cassida innotata BOHEMAN.

Cassida innotata BOHEMAN, 1854, Mon. Cassid., **2** : 403 (Natal); SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 58.

Buye-Bala, affl. g. Muye (affl. dr. Lufira) (1.760 m), 25-31.III.1948, 1 spn.; Kanonga (675 m), 17-22.II.1949, 2 spns.; Lusinga (1.760 m), 12-17.XII.1947, 1 spn.; [Kiamakoto-Kiwakishi (1.070 m)], 4-16.X.1948, 1 spn.

A widely distributed species, known from South, East, Central and West Africa. The two specimens from Kanonga are a variety with apical and humeral marginalia strongly marked.

Cassida lueboensis SPAETH.

Cassida lueboensis SPAETH, 1932, Rev. Zool. Bot. Afr., **22** (2) : 235 (Luebo).

Munoï, bif. Lupiala, affl. dr. Lufira (890 m), 6-15.VI.1948, 1 spn.

Previously this species has only been recorded from the Kasai Province of the Congo.

Cassida pernix SPAETH.

Cassida pernix SPAETH, 1917, Ann. hist.-nat. Mus. hung. **15** : 433 (Elisabethville)

Lusinga (galerie riv. Lusinga), 24.V.1945, 1 spn.

This little known species has only been noted from the southern region of the Congo.

Cassida spartea n. sp.

(Fig. 14.)

Colour : Testaceous; pronotum with a short longitudinal black mark centrally near the basal margin and a small irregular black marking on each side of the disc, scutellum black at the sides; disc of the elytra with a number of small irregular black marks at the base near the sides; antennae with the five terminal segments black.

Pronotum almost twice as broad as long, strongly explanate at the front and sides, front and hind margins evenly curved to form prominent side angles, disc strongly and closely punctured. Elytra with close, strongly punctured striae; explanate side margin strongly angled with the disc, wide, reducing at the apex to just over half its maximum width, front angles quite strongly drawn forward to form an acute angle. In profile the curve of the elytra is shallow, evenly rounded from behind the shoulder to the apex, without an umbo. Length : 4,5 mm.

Type : Buye-Bala (1.750 m), 24-31.III.1948.

The combination of colour pattern, shape and the wide side margins distinguish this species from its allies.

Cassida sublesta (WEISE).

Odontionycha sublesta WEISE, 1904, Arch. Naturgesch. **70** (1) : 173 (Usambara).

Cassida sublesta (WEISE), SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 332; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 58; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 237.

Kalumengongo (1.780 m), 21.I.1948, 1 spn.

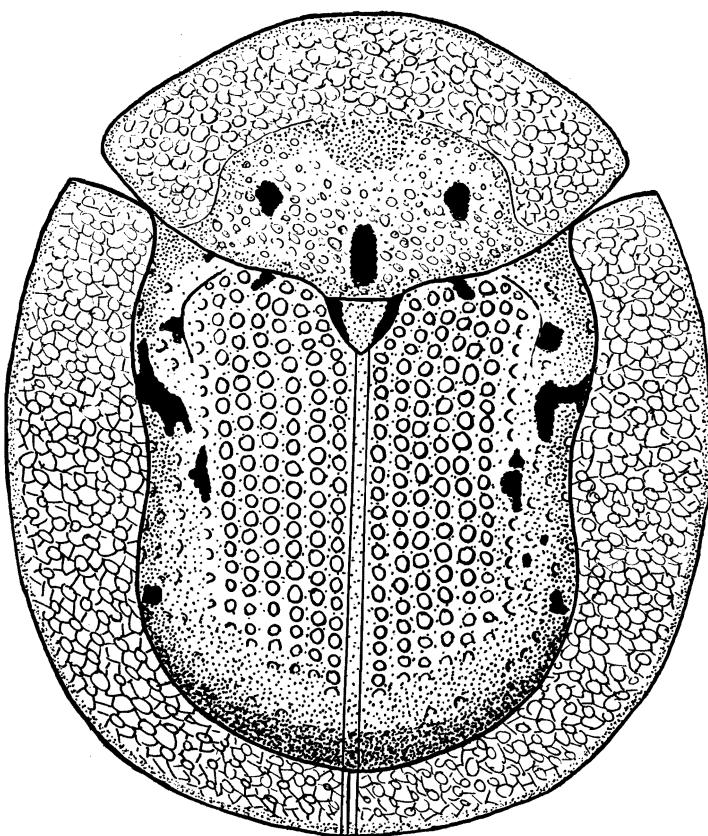


FIG. 14. — *Cassida spartea* n. sp.,
dorsal view.

Records for this species have previously all been from East Africa so that the present locality in the Congo extends its range slightly in a westward direction.

***Cassida tosta* KLUG.**

Cassida tosta KLUG, 1835, Erman's Reise, Ins., 47.

Riv. Bowa, affl. dr. Kalule-N., près Kiamalwa, 1-3.III.1949, 1 spn.; [Kembwile, rive g. Kalule-Nord], 28.II.1949, 1 spn.

Cassida tosta KLUG is known from West Africa eastward to Uganda. Both specimens vary from the series in the SPAETH Collection (Manchester) in that they do not have the window of transparent lighter colour on the side margin of the elytra as have SPAETH's specimens.

Cassida (Rhytidocassis) limbiventris BOHEMAN.

Cassida limbiventris BOHEMAN, 1854, Mon. Cassid., 2 : 479 (Senegal).

[Masombwe (1.120 m)], 6-9.VII.1948. 1 spn.

This species has been recorded from South Africa, West and East Africa.

Aethiopocassis manubialis (SPAETH).

Cassida manubialis SPAETH, 1906, Dtsch. ent. Z., **1906** : 385 (Nyassa, Ungoni).

Cassida (Aethiopocassis) Maynei SPAETH, 1933, Rev. Zool. Bot. Afr., **22** (4) : 351 (Tanganika : Albertville); 1934, loc cit., **24** (4) : 390 (n. syn.).

Cassida (Aethiopocassis) maynei ssp. *biramosa* SPAETH, 1934, loc. cit., **24** (4) : 390 (Kivu : Katona) (n. syn.).

Buye-Bala (1.750 m), 24-31.III.1948, 923 spns., 17-22.IV.1948, 37 spns.; Ganza (860 m), Kamandula, s.-affl. g. Lufira, VI.1949, 1 spn.; Kabwe-sur-Muye (1.320 m), 26.IV-5.V.1948, 8 spns., 12-26.V.1948, 3 spns.; Kabwekanono (1.815 m), 3-9.VIII.1947, 683 spns.; Kankunda (1.300 m), 18-23.IX.1947, 1 spn., 19-28.XI.1947, 41 spns.; Kaswabilenga (700 m), 18-23.IX.1947, 1 spn., 16-24.X.1947, 2 spns.; Katongo, affl. Mubale (1.750 m), 12.IV.1948, 52 spns.; Kaziba (1.140 m), 1-6.II.1948, 4 spns.; Lupiala (850 m), 24.X.1947, 3 spns.; Lusinga (1.760 m), 4.VI-12.VII.1947, 597 spns., 1-17.XII.1947, 26 spns.; Lusinga (riv. Kamitungulu), 13.VI.1945, 2 spns., 16-17.VII.1947, 1 spn., 31.V.1945, 1 spn.; Lusinga (riv. Lufwa), 1.VI.1945, 23 spns.; Lusinga (riv. Lusinga), 16.VI.1945, 1 spn.; Mubale (1.480 m), 10-12.V.1947, 1 spn.; Mukana (1.810 m), 15-19.I.1948, 31 spns.; Mukelengia, affl. Kalumengongo (1.750 m), 12.IV.1947, 30 spns.; Muye, tête de source (1.630 m), 6.IV.1948, 2 spns.; gorges de la Pelenge (1.150 m), 6-10.VI.1947, 1 spn.; [riv. Dipidi (1.700 m)], 9.I.1948, 1 spn.

The main character which SPAETH uses to separate the two species *A. maynei* and *A. manubialis* is a difference in the curvature of the pronotum. After examining 2.484 specimens, collected on this expedition, I have found that the pronotal character is a variable one and as no other structural character appears to distinguish these two species I have found it necessary to sink the name *maynei*, together with the subspecies *biramosa*, as synonyms of *manubialis*.

It is possible to recognise several colour variants of this species, one of which is worthy of special note as the dorsal pattern in this variety bears a strong superficial resemblance to that of *Aethiopocassis suspiciosa* ssp. *flavofemorata* SPAETH [1934, Rev. Zool. Bot. Afr., **24** (4) : 390].

A. manubialis (SPAETH) has been found in the Belgian Congo and East Africa.

Aethiopocassis revulsa (SPAETH).

Cassida revulsa SPAETH, 1906, Dtsch. ent. Z., **1906** : 390 (Nyassa, Ungoni).

Ganza (860 m), Kamandula, s.-affl. g. Lufira, VI.1949, 1 spn.; Ganza forêt-galerie Lukoka, 10.VI.1949, 3 spns.; Kabwe-sur-Muye (1.320 m), 26.IV-5.V.1948, 174 spns., 12-25.V.1948, 17 spns.; Kankunda (1.300 m), 19-24.XI.1947, 5 spns., 16-19.IX.1947, 1 spn.;

Kaswabilenga (700 m), 6-30.X.1947, 4 spns., 3-8.XI.1947, 2 spns.; Kaswabilenga (rive dr. Lufira) (700 m), 6-9.X.1947, 1 spn.; Kateke, s.-affl. Lufira (950 m), 23.XI-5.XII.1947, 13 spns.; Kimilombo, affl. Lusinga (1.700 m), 10.I.1948, 1 spn.; [riv. Dipidi (1.700 m)], 9.I.1948, 1 spn.

There are records for this species from Nyasaland, and the south western region of the Congo. This species can usually be quite easily separated from the other members of the section in the genus with the pronotal puncturation, by the colour and general shape, although a few small individuals from Kabwe-sur-Muye, Kankunda and Ganza show a less well defined colour pattern which bears a resemblance to that of *A. manubialis* (SPAETH).

***Aethiopocassis suspicosa* ab. *picturata* (SPAETH).**

Cassida suspicosa ab. *picturata* SPAETH, 1906, Dtsch. ent. Z., **1906** : 388 (Nyassa).

Mukana, 15-19.I.1948, 27 spns.

This species is known from South and East Africa, and the southern region of the Belgian Congo.

***Chiridopsis aubei* ab. *dissoluta* SPAETH.**

Chiridopsis aubei ab. *dissoluta* SPAETH, 1933, Rev. Zool. Bot. Afr., **22** (4) : 356 (Belgian Congo); SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 62.

Kalule-N., rive g. face Musinga-Kalenge (1.050 m), 28.II-3.III.1949, 1 spn.; Kaziba, affl. g. Senze, s.-affl. dr. Lufira (1.140 m), 18-26.II.1948, 1 spn.; Kaziba (1.140 m), 24.II.1948, 1 spn.; Mabwe (rive E. lac Upemba) (585 m), 17-31.XII.1948, 1 spn.; [Kembwile, rive g. Kalule-N. (1.050 m)], 3-5.III.1949, 5 spns.

A West and Central African species.

***Chiridopsis baumanni* (SPAETH).**

Chirida baumanni SPAETH, 1902, Ann. Soc. ent. Belg., **46** : 459 (Mpala; Kagera-Nil prope lacum Ukerewe).

Chiridopsis baumanni (SPAETH) SPAETH, 1924, Voyage Alluaud et Jeannel Afr. Or. (1911-1912), **18** : 338; SPAETH, 1943, in Parc National Albert. 1. Mission G. F. de Witte 1933-1935, fasc. **43** (9) : 62; SHAW, 1955, Ann. Mus. Congo Belge, Zool., **40** : 238.

Buye-Bala (1.750 m), 25-31.III.1948, 2 spns.; Kabwe, rive E. lac Upemba (585 m), 11-26.I.1949, 1 spn.; Kabwe-sur-Muye, affl. dr. Lufira (1.320 m), 6-12.V.1948, 2 spns.; Kilwezi (750 m), 2-14.VIII.1948, 1 spn.; Kaziba (1.140 m), 1-27.II.1948, 90 spns.; Kaziba, affl. g. Senze S. (affl. dr. Lufira) (1.140 m), 4-26.II.1948, 241 spns.; Lusinga (1.760 m), 15.IV.1947, 1 spn., 3.VII.1947, 1 spn., 22.X.1947, 1 spn., 28.XI-6.XII.1947, 1 spn.; Mabwe

(lac Upemba) (585 m), 1-12.VIII.1947, 4 spns., 18-27.VIII.1947, 1 spn., 4.IX.1949, 2 spns.; Mukana (Lusinga) (1.810 m), 15-19.I.1948, 1 spn., 6.III.1948, 2 spns., 14.IV.1947, 2 spns.; gorges de la Pelenge (1.150 m), 10-14.VI.1947, 1 spn.; [riv. Dipidi (1.700 m)], 10.I.1948, 3 spns.; [riv. Lufwa (affl. Lusinga) (1.700 m)], 17.III.1947, 1 spn.; [Kenia, affl. dr. Lusinga (1.585 m)], 8.V.1949, 1 spn.; [Kiamakoto-Kiwakishi (1.070 m)], 4-16.X.1948, 4 spns.

A East and Central African species.

***Chiridopsis nigrosepta* (FAIRMAIRE).**

Coptocycla nigrosepta FAIRMAIRE, 1891, Ann. Soc. Ent. Belg., **35** : 306
(Region of Somalia).

Chiridopsis nigrosepta (FAIRMAIRE) SPAETH, 1924, Voyage Alluaud et Jeannel
Afr. Or. (1911-1912), **18** : 340; SPAETH, 1933, Rev. Zool. Bot. Afr.,
22 (4) : 355.

Kamitungulu, affl. Lusinga (1.700 m), 4-7.III.1947, 1 spn.; Kaswabilenga (700 m),
28.X.1947, 1 spn.; Lusinga (1.760 m), 2.IV.1947, 1 spn.; Mabwe (lac Upemba) (585 m),
1-12.VIII.1947, 1 spn.; Munoi, bif. Lupiala, affl. dr. Lufira (890 m), 28.V-15.VI.1948,
1 spn.; gorges de la Pelenge (1.150 m), 21-31.V.1947, 1 spn.

This species has been recorded from Ethiopia to Tanganyika and from
the Belgian Congo to Angola.

Completed 23.XII.1960.
HERBERT MUSEUM, COVENTRY, WARWICKSHIRE.

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en collaboration avec

W. ADAM, A. JANSESENS, L. VAN MEELE et R. VERHEYEN (1946-1949)

Fascicule 63 (3)

**FULGORIDAE⁽¹⁾
(HOMOPTERA FULGOROIDEA)**

PAR

HENRI SYNAVE (Bruxelles)

Les *Fulgoridae* sont représentés, dans les récoltes effectuées au Parc National de l'Upemba, par une petite collection qui, si elle n'est pas importante par la quantité d'exemplaires recueillis, n'en est pas moins intéressante par le nombre de genres et d'espèces représentés. En effet, les 80 exemplaires récoltés, sont partagés entre 4 genres et 10 espèces. De ces dernières, 6 appartiennent au genre *Zanna*, 1 à *Druentia*, 2 à *Holodictya* et 1 à *Benamatapa*.

Sous-famille XOSOPHARINAE.

Genre **CAPENARIANA** LALLEMAND⁽²⁾.

LALLEMAND, V., 1959, Publ. Cult. Comp. Diam. Angola, XVI, p. 54.

Capenariana obscuripennis SCHMIDT.

SCHMIDT, E., 1924, Ent. Mitt., vol. 13, p. 100 (*Holodictya*).

1 ex. : Lusinga, 1.760 m, 10.IV.1947.

⁽¹⁾ Manuscrit déposé le 7 mars 1960.

⁽²⁾ Ce genre, dédié au spécialiste des *Membracidae*, A. L. CAPENER, aurait dû s'orthographier « *Capeneriana* » et non « *Capenariana* ».

Sous-famille **APHAENINAE.**Tribu **Benamatapini.**Genre **BENAMATAPA** DISTANT.

DISTANT, W. L., 1899, Ann. Mag. Nat. Hist., sér. 7, vol. 4, p. 114.

Benamatapa marshalli DISTANT.

DISTANT, W. L., 1899, Ann. Mag. Nat. Hist., sér. 7, vol. 4, p. 114.

1 ex. : Lusinga, 1.760 m, 18.VII.1947.

Tribu **Aphaenini.**Genre **HOLODICTYA** GERSTAECKER.

GERSTAECKER, A., 1895, Mitt. Naturw. Ver. Greifsw., vol. 27, p. 70.

Holodictya karschi SCHMIDT.

SCHMIDT, E., 1905, Stett. Ent. Zeit., vol. 66, p. 373, 375 (*Holodictya*).

3 ex. : Kankunda, rive dr. Lupiala, 1.300 m, 13-27.XI.1947; riv. Kateke, s.-affl. Lufira, 950 m, 23.XI-5.XII.1947.

Sous-famille **ENCHOPHORINAE.**Genre **DRUENTIA** STÅL.

STÅL, C., 1866, Hem. Afric., vol. IV, p. 144.

Druentia sicca WALKER.

WALKER, F., 1851, List Hom. Ins., vol. II, p. 272 (*Enchophora*).

6 ex. : riv. Kateke, s.-affl. Lufira, 960 m, 23.XI-5.XII.1947; Kanonga, 695 m, 13-27.IX.1947; Kaswabilenga, rive dr. Lufira, 700 m, 15.IX-6.XI.1947; 6-9.X.1947; 18-23.IX.1947; [riv. Kambi, affl. Grande-Kafwe, s.-affl. dr. Lufwa, versant S.-E. Kibara, 1.750 m, 25-27.VI.1945].

Sous-famille **ZANNINAE.**

Genre **ZANNA** KIRKALDY.

KIRKALDY, G. W., 1902, Journ. Bombay Nat. Hist. Soc., vol. 14, p. 47.

1. — **Zanna pustulosa** GERSTAECKER.

GERSTAECKER, A., 1873, Claus'Deckens's Reisen in Ost-Afr., p. 427, pl. XVII, fig. 9.

32 ex. : Kilwezi, affl. dr. Lufira, 750 m, 16-21.VIII.1948; 9-14.VIII.1948; 26-31.VII.1948; Kaswabilenga, rive dr. Lufira, 700 m, 15.IX-6.XI.1947; 18-25.IX.1947; [riv. Kambi, affl. Grande-Kafwe, S.-E. Kibara, 1.750 m, 25-27.VI.1945]; Munoi, bif. Lupiala, 980 m, IV-VI.1948; 28.V-15.VI.1948; 15-21.VI.1948; Lusinga, 1.760 m, 7.VIII.1947; riv. Mitoto, affl. Lusinga, ± 1.760 m, 9.VII.1945; riv. Lupiala, 30.VI.1945; riv. Kateke, s-affl. Lufira, 960 m, 23.XI-5.XII.1947; gorges de la Pelenge, 1.150 m, 6-10.VI.1947.

Outre ces 32 exemplaires, 15 autres ayant des genitalia ♂ semblables mais présentant un prolongement céphalique proportionnellement plus long, représentent la forme *noduligera* MÉLICHAR. Cette dernière est considérée comme sous-espèce par LALLEMAND dans sa révision de la famille (Publ. Cult. Compan. Diamant. Angola, 1959, n° 41, p. 107).

Gorges de la Pelenge, 1.150 m, 6-10.VI.1947; 6-20.VI.1947; 22.V-21.VI.1947; 16-18.VI.1947; Kamatshya, affl. Lusinga, 1.750 m, 5.VII.1945; Munoi, bif. Lupiala, 890 m, 18-21.VI.1948.

2. — **Zanna tenebrosa** FABRICIUS.

FABRICIUS, J. C. 1775, Syst. Ent., p. 674 (*Fulgora*).

8 ex. : Kanonga, 695 m, 13-27.IX.1947; Mabwe, rive E. lac Upemba, 585 m, 20-26.I.1949; Kaswabilenga, rive dr. Lufira, 700 m, 15.IX-6.XI.1947; Munoi, bif. Lupiala, affl. dr. Lufira, 890 m, 28.V-15.VI.1948; Kankunda, rive dr. Lupiala, 1.300 m, 13-27.XI.1947; Ganza, 860 m, 20-25.VI.1949.

3. — **Zanna schweizeri** SCHMIDT.

SCHMIDT, E., 1906, Stett. Ent. Zeit., vol. 67, p. 184.

1 ex. : riv. Mubale, 1.480 m, 1-20.VII.1947.

4. — *Zanna clavaticeps* KARSCH.

KARSCH, F., 1890, Berl. Ent. Zeitschr., vol. XXXV, p. 62.

5 ex. : Mukana, 1.810 m, 5.VIII.1947; 12-20.I.1948; Lusinga, riv. Kamitungulu, 1.760 m, 13.VI.1945; Kankunda, rive dr. Lupiala, 1.300 m, 13-27.XI.1947.

5. — *Zanna ascendens* LALLEMAND.

LALLEMAND, V., 1959, Publ. Cult. Compan. Diam. Angola, n°41, p. 112.

7 ex. : riv. Lusinga, 1.810 m, 16.VI.1945; Lusinga, 760 m, 12-17.XII.1947; Lusinga, riv. Kamitungulu, 1.760 m, 13.VI.1945; gorges de la Pelenge, 1.150 m, 22.V-21.VI.1947; 21-23.VI.1947; 16-18.VI.1947; Lusinga, 1.760 m, 22-23.IV.1949.

6. — *Zanna angolana* LALLEMAND.

LALLEMAND, V., 1959, Publ. Cult. Compan. Diam. Angola, n° 41, p. 108.

1 ex. : gorges de la Pelenge, 1.150 m, 21-23.VI.1947.

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PARC NATIONAL DE L'UPEMBA. — MISSION G. F. DE WITTE
en collaboration avec
W. ADAM, A. JANSENS, L. VAN MEEL et R. VERHEYEN (1946-1949)
Fascicule 63 (4)

OXYNOPTERINAE ET PHYSORHININAE (COLEOPTERA ELATERIDAE)

PAR

LOUIS LAURENT et ÉMILE TAMINIAUX (Gembloux) (¹)

La Mission G. F. DE WITTE a rapporté quatre *Oxynopterus* du Parc National de l'Upemba. Ayant effectué récemment une révision des formes aethiopiennes de la sous-famille des *Oxynopterinae*, nous pouvons présenter ici le résultat de l'identification de ces exemplaires, inaugurant ainsi le traitement des *Elateridae* du Parc National de l'Upemba qui se poursuivra corrélativement avec nos révisions des sous-familles.

Nous tenons à remercier M. le Président V. VAN STRAelen d'avoir bien voulu nous confier l'étude des *Elateridae* récoltées dans les Parcs Nationaux et M. le Prof^r J. LECLERCQ pour l'aide et les conseils dont il nous favorise.

Sous-famille OXYNOPTERINAE.

Genre **OXYNOPTERUS** HOPE, 1842.

Oxynopterus HOPE, Proc. Zool. Soc. London, X, 1842, p. 77. Type : *Elater mucronatus* OLIVIER, de Java; HOPE, Ann. Mag. Nat. Hist., 1843, p. 394; LACORDAIRE, Gen. Col., IV, 1857, p. 159; CANDÈZE, Mon. Elatérides, I, 1857, p. 357; CANDÈZE, Rév. Elatérides, 1874, p. 204; CANDÈZE, Cat. Méth. Elatérides, 1891, p. 46; SCHWARZ, Gen. Ins., 46, Elateridae, 1906, p. 55; FLEUTIAUX, Faune Colonies françaises, 1927, pp. 110 et 119; FLEUTIAUX, Rév. Elatérides Indo-Chine française, 1947, p. 308.

(¹) Contribution du Laboratoire de Zoologie Générale, Institut Agronomique, Gembloux.

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Elasmoscerus BOHEMAN, Ins. Caffrariae, 1851, p. 381.

Megalorhipis LACORDAIRE, Gen. Col., IV, 1857, p. 160; CANDÈZE, Mon. Elatérides, I, 1857, p. 359.

Leptophyllus HOPE, Proc. Zool. Soc. London, X, 1842, p. 79; CANDÈZE, Rév. Elatérides, 1874, p. 206.

Oxynopterus (Megalorhipis) niger CANDÈZE.

Oxynopterus niger, CANDÈZE, Elatérides nouv., VI, 1896, p. 19. Type : ♂ Luluabourg, Kasai, Congo, CH. HAAS, Institut Royal des Sciences Naturelles de Belgique.

Allotype : ♀ Lubumbashi, Katanga, BUTTGENBACH, Musée Royal de l'Afrique Centrale, Tervuren.

Oxynopterus (Leptophyllus) niger SCHWARZ, Gen. Ins., 46, Elateridae, 1906, p. 55; SCHENKLING, JUNK, Col. Cat., 80, Elateridae, 1925, p. 69.

Parc National de l'Upemba : Mabwe. lac Upemba, 585 m, ♂, 1-8.IX.1947; Kaswabilenga, rive dr. de la Lufira, 700 m, ♂, 6-9.X.1947; Masombwe, riv. Kanakakazi, 1.120 m, ♂, 4-16.X.1948; Kaswabilenga, 700 m, ♀, 24.IX.1947.

Les quatre spécimens sont entièrement noirs.

Cet insecte appartient au sous-genre *Megalorhipis* LACORDAIRE dont les antennes sont composées de 12 articles chez le ♂ comme chez la ♀, disposition exceptionnelle chez les *Elateridae* et qui ne se rencontre guère, en dehors des *Oxynopterinae* que dans le genre *Hemirhipus* LATREILLE (*Hemirhipinae*). Nous pensons, comme CANDÈZE (1895), que les deux genres *Oxynopterus* et *Leptophyllus* n'ont plus d'autre raison d'être séparés que celle qui réside dans leur distribution géographique. FLEUTIAUX (1927) avait tenté de les distinguer d'après la conformation de la suture méso-méasternale, mais ce caractère est trop variable d'une espèce à l'autre pour justifier une coupe générique.

Sous-famille PHYSORHININAE.

Genre **ANCHASTUS** LE CONTE, 1853.

Anchastus LE CONTE, Trans. Amer. Philos. Soc. (N. S.), X, 1853, p. 459. (Type : *Anchastus digitatus* LE CONTE, ibid.). LACORDAIRE, Gen. Col., IV, 1857, pp. 167, 176; CANDÈZE, Mon. Elatérides, II, 1859, pp. 387, 397; CANDÈZE, Cat. Méth. Elatérides, 1891, p. 104; SCHWARZ, Gen. Ins., 46, 1906, Elateridae, pp. 131, 133; FLEUTIAUX, Voy. Alluaud et Jeannel Afr. Or., 1919, Col., XIII, p. 71; FLEUTIAUX, Elatérides Indochine française, Enc. Entom., Coleoptera, 1929, III, p. 38; MIWA, Fauna Elateridae Jap. Emp., 1934, pp. 21, 86; VAN ZWALUWENBERG, Ins. Micronesia, 1957, XV, I, Elateridae, p. 58; LAURENT et TAMINIAUX, *Physorhininae* rég. aethiopienne, Bull. Soc. Roy. Sc. Liège, XXX, 1961, p. 79.

Ampedus GERMAR, Zeitschr. f. Entom., 1839, p. 190.

Les trois espèces récoltées par la Mission G. F. DE WITTE au Parc National de l'Upemba appartiennent toutes au sous-genre *Brachycrepis* LE CONTE, (2^e et 3^e articles des antennes plus longs, pris ensemble, que le 4^e).

1. — **Anchastus (Brachycrepis) upembae** n. sp.

(Fig. 1.)

Type : Kabwe, rive Est du lac Upemba, 585 m, 26.I.1949.

Paratypes : Lusinga, 1.760 m, 8-17.XII.1947, 3 ex.; Kankunda, 1.300 m, 22-24.XI.1947; riv. Lufwa, 1.700 m, 16.I.1948, ♀.

Longueur : 5,3 mm. — Elliptique-ovale allongé, déprimé; dessus noirâtre à longue pubescence fauve; tête large ponctuée comme le pronotum. Antennes longues dépassant les angles postérieurs du corselet de deux articles et demi : 2 petit, arrondi, 3 et 4 longs et égaux. Pronotum plus large que long,

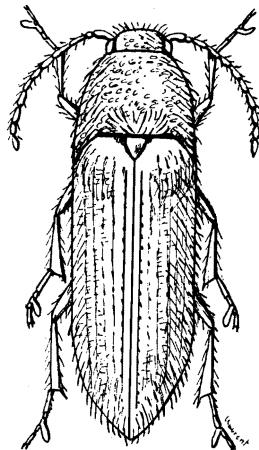


FIG. 1. — *Anchastus (Brachycrepis) upembae* n. sp.

ses côtés faiblement courbes, court par rapport aux élytres (longueur pronotum-élytres : 3,5); ponctuation tout à fait superficielle, les points petits et très espacés, inégaux, plus petits que les espaces qui les séparent, le fond réticulé; angles postérieurs carénés à l'angle interne seulement. Élytres très longs, rétrécis-arrondis à partir de leur quart postérieur; stries et points effacés en arrière, ceux-ci assez gros, empiétant sur les intervalles qui sont plans. Dessous brun-rouge. Hanches postérieures n'atteignant pas le bord antérieur du 2^e segment abdominal. Antennes et pattes rousses.

♀ : semblable au ♂; antennes dépassant les angles postérieurs du pronotum d'un article et demi seulement.

Espèce facilement reconnaissable à sa petite taille et à son pronotum très court par rapport aux élytres; à placer après *angustus* dans le tableau dichotomique.

2. — **Anchastus (Brachycrepis) hebetatus** LAURENT et TAMINIAUX.

Physorhininae rég. aethiopienne, Bull. Soc. Roy. Sc. Liège, XXX, 1961 (Type Nizi-Blukwa, Congo, Coll. A. COLLART).

Parc National de l'Upemba : Kaswabilenga, 700 m, 3-4.XI.1947, 4 ex.; riv. Lupiala, 850 m, 24.X.1947, 1 ex.

Très voisin de *dubius* KLUG.

3. — **Anchastus (Brachycrepis) pusillus** n. sp.

Type : Parc National de l'Upemba, Lusinga, 1.760 m, 1-8.XII.1947, un seul exemplaire.

Longueur : 5,2 mm. — Petit, elliptique, entièrement testacé à pubescence claire, la tête large, rembrunie; front largement arrondi, mandibules noires. Antennes très longues, dépassant les angles postérieurs du pronotum de trois articles : 2 petit, le 3^e aussi long que le 4^e.

Pronotum plus large que long, ses côtés parallèles en arrière, puis rétrécis vers l'avant, presque rectilignes; ses angles postérieurs courts, un peu recourbés en dedans, portant une carène interne, l'externe nulle ou obsolète; ponctuation superficielle, inégale, espacée à fond réticulé. Élytres longs par rapport au pronotum (1 à 3); soies fines allant presque jusqu'à l'extrémité, peu visibles ainsi que les points qu'elles portent; dessous de même couleur; hanches postérieures longues atteignant le bord antérieur du 2^e segment abdominal; antennes et pattes concolores.

Seule espèce décrite, parmi les *Brachycrepis* aethiopiens, qui présente à la fois des hanches et des antennes longues et dont le pronotum soit dépourvu de carène externe aux angles postérieurs.

BIBLIOGRAPHIE.

- CANDÈZE, E., 1857, Monographie des Elatérides, II (*Mém. Soc. Roy. Sc. Liège*, XII, pp. 395, 397).
- 1895, Elatérides nouveaux, VI (*Ibid.*, XIX, p. 19).
- FLEUTIAUX, E., 1927, Elatérides de l'Indo-Chine française (*Faune des Colonies françaises*, I, p. 120).
- LAURENT, L. et TAMINIAUX, E., 1960, Oxynopterinae de la région aethiopienne (*Bull. Soc. Sc. Liège*, XXIX, p. 156).
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