

MINISTERIE VAN ONDERWIJS, KUNSTEN EN WETENSCHAPPEN

ZOOLOGISCHE MEDEDELINGEN

UITGEGEVEN DOOR HET

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE TE LEIDEN

Deel 40 no. 22

21 juli 1965

ON SOME SCOLYTIDAE AND PLATYPODIDAE (COLEOPTERA), MAINLY FROM AFRICA AND THE ORIENTAL REGION

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During the past year I have had the opportunity of examining several interesting collections of Scolytidae and Platypodidae from Ghana, Ivory Coast, Kenya, Nigeria and Uganda, as well as most of Dr. E. Mjöberg's older collections made in Sarawak. It is more convenient to deal with new species, and notes on others, all in this one paper, rather than in several short papers.

SCOLYTIDAE

NEW RECORDS FROM THE IVORY COAST

A large collection made by Dr. L. Brader at Adiopodoume, by means of sticky cloth traps, between September 1962 and February 1963, includes a considerable number of species that have not previously been recorded from the Ivory Coast. The following two species are of particular interest.

Hypothenemus rugifer Schedl (in press). This recently discovered species has, as far as I am aware, been known from only two short series, both from Uganda. A single specimen is included in Dr. Brader's Adiopodoume collection.

Hypothenemus obscurus (Fabricius). The first African record of this species, which is widely distributed in tropical America and the eastern United States. A specimen from this series was sent to Professor S. L. Wood, who has kindly taken the trouble to confirm my identification and has commented: "It is quite typical of specimens taken in the northern part of its range in the United States. Before the specimen arrived, I suspected it would be the variety that has spread westwards across the Pacific Ocean (*Stephano-*

deres hivaoea Beeson), and I was rather surprised to find that it was not that form." Dr. Brader's collection contained a good series of this species, and it is probably established in the Ivory Coast.

The occurrence of the other species new to the Ivory Coast occasions no surprise, as they are either present, and for the most part common, in neighbouring countries, or else known to be widespread in tropical Africa. They include: *Chortastus similis* Eggers, *Polygraphus brunneus* Eggers, *P. natalensis* Eggers, *P. granulifer* Eggers, *P. tropicus* Eggers, *Microborus camerunus* (Eggers), *Hypocryphalus mangiferae* (Stebbing), *Taenioglyptes paganus* (Eichhoff)¹), *Hypothenemus camerunus* (Eggers), *H. occidentalis* (Schedl), *H. bauhiniae* Schedl, *Pityophthorus suturalis* Eggers, *P. togonus* Eggers, *P. busseae* Schedl, *Tiarophorus elongatus* Schreiner, *T. hypaspistes* Schedl, *Premnobius adjunctus* (Eggers), *Xyleborus cristatus* (Fabricius), *X. albizzianus* Schedl, *X. natalensis* Schaufuss, *X. psaltes* Schedl, *X. acanthus* Schedl, *X. africanus* Eggers, *X. collarti* Eggers.

SOME RECORDS FROM SARAWAK

Many species of Scolytidae collected by Dr. E. Mjöberg in Sarawak have been recorded in various papers, notably by Schedl (1955, Sarawak Mus. J. (n.s.) 6: 154-163). In many instances, however, these specimens, which were included in the former Sampson collection and are now in the British Museum, have merely borne the label "Borneo". I have now found a box containing numerous specimens accompanied by pencil notes giving more exact locality data, and the following are of interest, especially with reference to altitude.

Taenioglyptes subcylindricus (Schedl). Tutoh River. Mt. Murud at 6000 feet.

Hypothenemus birmanus (Eichhoff). Mt. Murud at 6000 feet.

Cyrtogenius perakensis Schedl. Mt. Dulit at 3500 feet.

Poecilips longior Eggers. Tutoh River. Mt. Murud at 6000 and 6500 feet.

Ozopemon latus Eggers. Mt. Murud, foot and at 6000 feet. Kelabit Country, Tama Liput's house.

Xyleborus perforans (Wollaston). Mt. Murud at 6000 feet.

¹) Dr. K. E. Schedl (1961, Rev. Ent. Mocamb. 4: 457) has attempted to show that *Bostrichus piceae* Ratzeburg, not *B. asperatus* Gyllenhal, is the type species of *Cryphalus* Erichson, and that the name *Cryphalus* should therefore be applied to *Taenioglyptes* Bedel, not to *Trypophloeus* Fairmaire, (see Wood, 1954, Univ. Kansas Sci. Bull. 36: 988). Schedl's argument, however, is of a nature that requires a decision of the International Commission on Zoological Nomenclature. Unless the Commission's support is sought and obtained, it is proper to follow Wood's apparently correct interpretation. The same applies to Schedl's argument that *Xyloterus* Erichson is the correct name of *Trypodendron* Stephens.

Xyleborus similis Ferrari. Baram River. Mt. Murud at 6000 feet. Kelabit Country, Tama Liput's house.

Xyleborus diversicolor Eggers. Sarawak, without further details.

Xyleborus horridulus Browne. Foot of Mt. Murud. Mt. Dulit at 3500 ft.

The two specimens collected by Mjöberg differ from the type, and also from three other specimens in my collection, in having the declivital tubercles of the elytra more strongly developed, those at the apices of interstriae 2, 3 and 4 forming slender, curved, pointed spines. I believe them, however, to be within the specific range of variation.

My description of the scutellum of *X. horridulus*, difficult to examine in my original specimens because of the presence of a gummy substance, is inexact. The scutellum is visible as a small, knob-like structure, not nearly filling a very broad, shallow, basal emargination of the elytra. This character places the species in the subgenus *Xyleborinus*.

Xyleborus puer Eggers. Mt. Dulit at 3500 feet.

Xyleborus destruens Blandford. Mt. Murud at 6000 feet.

Xyleborus emarginatus Eichhoff. Tutoh River. Mt. Dulit at 3500 feet. Kelabit Country, Tama Liput's house.

Xyleborus robustipennis Schedl. Foot of Mt. Murud.

The Mjöberg specimens from Sarawak provide a good series, to which Schedl's types, which only bear the general Borneo label, almost certainly belong. The specimens vary from dark reddish brown to almost black, and in length from 4.8 to 5.1 mm. They thus fall within the upper size range of *X. amphicranoides* Hagedorn, but are stouter, and are distinguished by the absence of a constriction before the apex of the elytra and by the shape of the elytral declivity.

Xyleborus fallax Eichhoff. Tutoh River. Mt. Dulit at 3500 feet. Mt. Murud at 6000 feet.

Xyleborus cylindricus Eggers. Mt. Murud at 6000 feet.

Xyleborus ursulus Eggers. Mt. Murud, foot and at 3500 feet.

Arixyleborus scabripennis (Blandford). Mt. Dulit at 3000 and 3500 feet.

Pseudowebbia seriata Browne. Kelabit Country, Tama Liput's house.

Webbia sarawakensis Schedl (in press). Foot of Mt. Murud.

Scolytoptatypus glaber Eggers. "Borneo" (probably Sarawak).

SYNONYMICAL NOTES AND DESCRIPTIONS

Acacis Lea, 1910 = **Pseudoacacis** Schedl, 1963, syn. nov.

In several recent papers Dr. K. E. Schedl has insisted that within a genus of the Scolytidae the number of segments of the antennal funicle is, with rare variations, constant. In adherence to this rule (1963, Beitr. Ent. **13**:

177), he transferred *Acacisis borneensis* Browne to a new genus *Pseudo-acacisis*, on the grounds that he found in it a 5-segmented funicle, whereas the funicle of *Acacisis* is typically 7-segmented.

It is not to be denied that the segmentation of the funicle provides a useful character in many groups of the family, but it is also clear that adherence to an immutable "funicle rule" can result in remarkable and unnatural grouping. In the present instance, I too have found a 5-segmented funicle in *Acacisis borneensis*, but my only preparation of *A. malayensis* Browne shows a quite typical *Acacisis* antenna with 7 segments in the funicle. All other characters, however, indicate that *A. malayensis* is much more closely related to *A. borneensis* than to the other known species of the genus. Yet the funicle rule demands that *A. borneensis* must be placed in a new genus, while *A. malayensis* must remain with its more distant relations in *Acacisis*; which seems to me to be irrational.

Ctonoxylon atrum sp. n.

Of general form and sculpture very similar to *C. griseum* Schedl, 1941, *C. hamatum* Schedl, 1941, and *C. methneri* Eggers, 1922, but the basal part of the pronotum much more coarsely punctured, and the elytral pubescence consisting of very short, dark, hair-like (not scale-like) bristles.

3.3 to 3.4 mm long, 2.2 times as long as wide, black, mainly subnitid, the antennae yellow. Frons broad, subnitid medially, matt above and at the sides, plano-convex, feebly depressed below the level of the eyes, finely punctured, the punctures sparse medially, dense elsewhere, pubescence of short, erect, dark bristles. Pronotum 1.2 times as wide as long, widest at about the basal fourth, strongly convex, the summit situated behind the middle, sides rounded, more strongly incurved from just behind the middle, apex strongly rounded with 2 closely spaced teeth situated just above the margin; anterior slope with well separated, moderately strong asperities across almost its whole width, ground shallowly punctured, basal area subnitid, very coarsely, very densely rugose-punctate, the punctures mostly of hexagonal form and separated only by narrow rims; pubescence rather sparse, consisting of short, erect, dark, hair-like setae. Scutellum finely punctured. Elytra about 1.6 times as long as the pronotum, the sides very slightly convergent from the base to beyond the middle, then incurved, the apex weakly divaricate (elytra longest opposite the 2nd interstria), disc cylindrical, declivity beginning behind the apical third, convex, the extreme apical margin reflexed; deeply striate, the striae shining, with small, deep punctures separated by spaces 2 or more times as wide as their diameter, (the punctures a little larger and closer in the outer striae), the interstriae strongly convex,

subnitid, 1st interstria closely uniseriate-punctate, lowered toward the scutellum and slightly outcurved at the middle of the disc, the other interstriae, densely, deeply, irregularly biseriate-punctate, the punctures at least as large as those of the striae, the base of the 7th interstria smooth and slightly swollen; on the declivity all the interstriae become uniseriate-punctate, interstriae 1-4 run straight through to the apex, interstria 6 joins interstria 4 at about the middle of the declivity, thus cutting off interstria 5, interstria 8 joins interstria 4 near the apex, cutting off interstria 7; vestiture of short, dark, erect, hair-like setae, similar to those of the pronotum. Abdomen longitudinally rather strongly raised, the ventrites strongly, very densely punctured, the ventral surface of the thorax more strongly punctured than the abdomen.

Holotype in the British Museum; a paratype in the collection of the Department of Forest Research, Ibadan, and another in the author's collection.

Nigeria: Idanre, ex *Canthium* sp.

***Cryphalomorphus braderi* sp. n.**

One of the more cylindrical, slender species of the genus, apparently (from description) most closely related to *C. longipennis* (Eggers, 1936), but easily distinguished by the distinctly armed anterior margin of the pronotum, the rather large scutellum, and the indistinct striae of the elytra.

1.7 to 1.8 mm long, about 2.5 times as long as wide, cylindrical, uniform brown, moderately shining. Frons feebly depressed below, above subconvex, shining, finely and not densely punctured, pubescence inconspicuous. (In both specimens the sculpture and pubescence of the lower part of the frons are concealed by gum, evidently the material used on the traps). Antennal club large, obovate, about 1.4 times as long as wide and twice as long as the funicle. Pronotum just wider than long, strongly convex, feebly depressed behind the summit, which is situated a shade in front of the middle, base finely margined, sides subparallel to about the middle, apex moderately broadly rounded with 6 subequal, closely spaced asperities, the asperate patch of the anterior slope not reaching the sides, the asperities strong, transverse, in well separated, subconcentric rows and tending to coalesce, especially towards the sides, crowded at the summit, the basal area and sides subnitid, very finely and not very densely punctured, and with a vestiture of minute, fine, pale, recumbent scales. Scutellum rather large, subtriangular. Elytra about 1.6 times as long as the pronotum, the sides subparallel to about the apical third, the apex strongly rounded, disc cylindrical, declivity occupying rather less than the apical third, evenly convex; striae indicated as indistinct

rows of moderately large but very shallow punctures, becoming narrower but more distinct and very slightly impressed on the declivity, the interstriae flat, very finely, densely punctured with vestiture of numerous, recumbent, minute, pale scales, and each with a median row of larger but rather short, inclined pale scales, these on the disc separated by spaces at least as great as their own length but becoming a little closer on the declivity.

Holotype in the Leiden Museum; a paratype in the author's collection.

Ivory Coast: Adiopodoume, sticky cloth trap, 12.xi.1962 (holotype) and 31.xii.1962, L. Brader coll.

***Pityophthorus acuminatus* sp. n.**

Female. — Closely related to *P. togonus* Eggers, 1920, but the frontal brush of hairs is small and linear (in *P. togonus* larger and subcircular), the basal part of the disc of the pronotum is densely, finely subrugose punctate without trace of a smooth median line (in *P. togonus* smooth, moderately densely, rather finely punctured, a median line at least indicated), the discal interstriae of the elytra are subimpunctate (in *P. togonus* rather densely punctured on the posterior half) and the sutural apex of the elytra is more strongly produced.

1.6 mm long, 2.3 times as long as wide, shining, brown. Frons shining, flattened medially, finely and not densely punctured, between the eyes a small brush of golden hairs directed downwards, the distance between the brush and the inner margin of the eye approximately equal to the length of the brush and greater than its width. Pronotum about 1.1 times as long as wide, slightly depressed behind the summit, which is situated just in front of the middle, widest near the base, the sides very gradually incurved to about the middle, then more strongly so, the apex broadly rounded with a long row of very weak, low asperities; anterior slope densely asperate, a concentric arrangement scarcely evident, the asperities transverse, the summit densely rugose, the posterior area of the disc rather densely but finely rugulose-punctate medially, with no median line, towards the sides smooth, shining and subimpunctate; vestiture of fine, short hairs on the asperate part, the remainder glabrous. Scutellum subtriangular, shining. Elytra about 1.6 times as long as the pronotum, the sides subparallel to about the apical fourth, then incurved, the apex rather strongly produced at the suture, disc cylindrical, declivity beginning at about the apical fourth, steeply convex; disc glabrous, regularly, closely, moderately finely seriate punctate, the striae not impressed, the interstriae flat, smooth, subimpunctate; on the declivity the suture distinctly raised, with a row of minute granules and fine, yellowish hairs, interstria 2 feebly depressed, subimpunctate and glabrous, the outer

interstriae with uniseriate granules and hairs similar to those of the suture.

Holotype and 2 paratypes in the Leiden Museum; 3 paratypes in the author's collection.

Ivory Coast: Adiopodoume, on sticky cloth trap, 29.x.1962, 26.xi.1962, 17.xii.1962, 17.i.1963, L. Brader coll.

***Pityophthorus setifer* sp. n.**

Related to *P. togonus* Eggers, 1920, and *P. acuminatus* sp. n. (above), but stouter and easily distinguished by the pubescence of the elytral declivity; this consists of rather short, stiff, blunt, more or less clavate setae, whereas in the other two species it consists of fine hairs.

1.5 to 1.7 mm long, 2.45 times as long as wide, subnitid, dark brown, the appendages a little paler. Frons subconvex, subnitid, densely and rather finely punctured, pubescence inconspicuous. Pronotum as wide as long, not or scarcely depressed behind the summit, which is situated just in front of the middle, sides almost straight and subparallel from the basal angles to the middle, then abruptly incurved, the apical margin narrow, but broadly rounded, with a row of 6 to 8 very low asperities; anterior slope densely asperate, the asperities transverse and not concentrically arranged, summit densely rugose, the posterior part of the disc weakly but distinctly rugose with a smooth median line feebly indicated, towards the sides smooth, sparsely and very finely punctured; pubescence of fine, short hairs on the asperate part, the remainder glabrous. Scutellum moderately large, shining. Elytra 1.45 times as long as the pronotum, widest at the base, the sides subparallel to the middle, then gradually incurved, the sutural apex produced into a short, blunt point as in *P. togonus*, disc cylindrical, declivity beginning at about the apical third, steeply convex; disc subglabrous, finely seriate punctate, the striae not impressed, the interstriae flat with a few widely separated punctures, the inner interstriae weakly rugulose; on the declivity the suture weakly raised, the second interstria very weakly depressed, all the interstriae except the second with a regular row of small granules and rather short, stiff, pale, clavate setae, the second interstria with only a few setiferous granules near the summit and apex.

Holotype and 2 paratypes in the Leiden Museum; another paratype in the author's collection.

Ivory Coast: Adiopodoume, 15.x.1962, 10.xii.1962, 17.xii.1962, 9.i.1963, on sticky cloth traps, L. Brader coll., types.

Ghana: Kumasi, 23.ix.1960, light trap, F. G. Browne coll.

Another Adiopodoume specimen has most of its sculpture concealed by

a gummy substance; it appears to be identical, but is only 1.2 mm long.

Mimidendrulus rugicollis sp. n.

Closely related to *M. camerunus* Schedl, 1941, but the first stria of the elytra is not impressed either on the disc or the declivity, the interstriae are not or scarcely rugose, the apex of the elytra is strongly (not broadly) rounded, and the arrangement of the pronotal rugosities is slightly different. The sexual dimorphism is very similar to that of *M. movoliae* Schedl, 1957.

Male. — 1.8 to 2.0 mm long, 2.7 times as long as wide, mainly subnitid, reddish brown, the appendages paler. Frons concealed in both the available specimens. Pronotum 1.1 times as long as wide, longitudinally feebly and evenly convex, the sides subparallel in the basal half, then incurved, apex moderately narrowly rounded, the entire surface covered with low rugosities, these smaller, more granular, and distinctly separated on the anterior third, broader and denser medially, becoming weaker towards the base, a few punctures among the rugosities near the base medially, no median line; pubescence fine and not conspicuous. Scutellum small, triangular, blackish. Elytra 1.5 times as long as the pronotum, the sides subparallel to about the apical fourth, apex strongly rounded and not margined, disc cylindrical, declivity beginning at about the apical third, steeply convex when seen in profile; disc finely seriate punctate, the striae not impressed, their punctures separated by spaces at least as wide as their diameter, the interstriae flat and smooth or almost so, finely and more sparsely uniseriate punctate, one interstrial to about every three stria punctures but becoming a little closer towards the declivity, the interstrial punctures with fine, erect, yellowish hairs which may be lost in old specimens; on the declivity the suture weakly raised and interstria 2 correspondingly depressed, the striae not impressed, their punctures very small and often only the first stria distinct, all the interstriae (except interstria 2) with rather sparse uniseriate punctures and fine, erect hairs.

Female. — A little more slender than the male. Frons somewhat depressed between the eyes, the sculpture for the most part concealed by dense, moderately long, yellowish hair. On the elytral declivity the suture scarcely raised, stria punctures indistinct, all the interstriae with an even row of fine granules and fine, moderately long, erect, pale yellow hair. Other characters as in the male.

Holotype (male) and a paratype (female) in the Leiden Museum; a paratype of each sex in the author's collection.

Ivory Coast: Adiopodoume, 17.xi.1962, 26.xi.1962, 4.ii.1963, 18.ii.1963, on sticky cloth traps, L. Brader coll.

Cyrtogenius longipennis sp. n.

Related to *C. subacuminatus* Schedl, 1939, *C. frigidus* Schedl, 1942, and *C. vaticae* (Nunberg, 1961), species which have the apex of the elytra angulate to subacuminate with an acute, granulate apical margin. *C. longipennis* is larger than any of these, its pronotum is broader but its elytra relatively slender.

Male. — 2.9 to 3.0 mm long, about 3.0 times as long as wide, subnitid, rather uniform yellowish brown. Frons subnitid, flat to weakly depressed between the eyes, the flattened area very densely, very finely punctured and with yellow hairs, these hairs longer around the periphery, especially near the upper, inner border of the eyes. Eyes rather large, feebly emarginate. Pronotum less than 1.1 times as long as wide, longitudinally very feebly convex, sides subparallel in the basal half, apex rather broadly rounded, the anterior half densely, finely asperate, the asperities extending to about the basal third at the sides, the basal part of the disc strongly, rather densely punctured with a narrow, impunctate median line; pubescence fine and moderately long, almost confined to the asperate area. Scutellum triangular, shining, impunctate. Elytra 1.8 times as long as the pronotum, the sides parallel to about the apical fourth, then abruptly convergent in a weak curve to a narrowly, angulately rounded apex, the apical margin acute up to the 7th interstria and marked by several dark tubercles; disc cylindrical, declivity beginning behind the apical fourth, abrupt, somewhat flattened on each side of the suture, which is gradually raised towards the apex; disc coarsely seriate punctate, the striae only weakly impressed, their punctures separated by spaces smaller than their diameter, large at the base but becoming smaller near the declivity, the interstriae flat, smooth, only a little wider than the striae, each with a row of small, deep punctures which are almost as numerous as those of the striae, some of the interstitial punctures subgranulate and bearing moderately long, fine, erect hairs; on the declivity the striae punctures smaller and shallower, the interstitial punctures shallower, the raised suture also with a row of about 5 small, dark tubercles, similar but fewer tubercles on interstriae 3 and 5, interstriae 2 and 4 each with only a single tubercle at the summit, all the tubercles with moderately long, fine hairs.

Females. — Frons less flattened, the punctures a little larger and sparser, the pubescence much sparser and irregularly arranged. Other characters as in the male.

Holotype (male) and paratypes in the British Museum.

Sarawak: Foot of Mt. Murud, E. Mjöberg coll.

***Xylocleptes irretitus* sp. n.**

Closely related to *X. brownei* Schedl, 1964, but the elytral sculpture distinctly finer, the interstriae on the declivity without punctures but each with a row of minute granules, an apical margin of the elytra scarcely evident.

1.5 to 1.9 mm long, 2.5 times as long as wide, subnitid, dark reddish brown, the appendages paler. Frons subnitid, moderately finely punctured, rather weakly transversely depressed, the depression with long hairs. Pronotum as wide as long, longitudinally only very feebly convex, sides subparallel in less than the basal half, then weakly incurved, apex broadly rounded, the anterior half moderately finely and moderately densely punctured with some small, weak rugae intermixed, on the posterior half the punctures much larger but shallow, an impunctate median line extending from near the base to beyond the middle, pubescence fine and not conspicuous. Scutellum small, smooth, shining. Elytra about 1.6 times as long as the pronotum, sides subparallel to about the apical third, apex rounded without a distinct margin, disc cylindrical, declivity beginning behind the apical third, steep and strongly convex, the suture weakly raised but the adjacent interstriae not noticeably depressed; disc rather finely seriate punctate, the striae not or scarcely impressed, their punctures separated by spaces about equal to their diameter, no striae hairs, the interstriae flat, uniseriate punctate, the punctures almost as large as those of the striae but only about two-thirds as numerous and bearing fine, erect yellowish hairs; on the declivity the striae punctures smaller, the interstriae punctures replaced by minute granules, pubescence as on the disc. Outer edge of the front tibia with 4 strong teeth.

Holotype and a paratype in the Leiden Museum; another paratype in the author's collection.

Ivory Coast: Adiopodoume, October 1962 to February 1963, on sticky cloth traps, L. Brader coll.

***Mimips tanganyikaensis* Schedl, description of female**

The original description of this species (Schedl, 1957, Ann. Mag. nat. Hist. (12) 10: 157, as *Ips*) refers to the male. The female, of which there are several specimens taken in association with males, in the British Museum, is very similar. The frons, however, is not depressed below, but is entirely weakly convex; rather shining, moderately strongly and not very densely punctured, and with long, fine hairs; the tubercles on the upper lateral region of the elytral declivity are small, but their size is variable also in the male.

Mimips atratus sp. n.

Related to *M. tanganyikaensis* Schedl, 1957, but the disc of the pronotum not depressed behind the summit, its apical margin with a distinct row of asperities, and the elytra much more finely sculptured.

Male. — 2.3 mm long, 2.75 times as long as wide, cylindrical, mainly subnitid, both the dorsal and ventral surfaces very dark brown to black, the appendages brown. Frons broadly depressed, densely punctured, only in the youngest available specimen (colour brown) with long, fine hair. Antennal club of only moderate size, smaller than in *M. tanganyikaensis*. Pronotum 1.1 times as long as wide, not very strongly convex, the summit situated in front of the middle and not raised, sides subparallel from the base to about the middle, then incurved, the apex broadly rounded medially and with a row of about 10 low but distinct asperities, the anterior slope obliquely convex, densely but rather irregularly asperate, the asperities becoming smaller and crowded towards and at the summit, the posterior part smooth, moderately densely, very finely punctured, the median line impunctate but not raised; whole surface with fine, erect hair, longer on the anterior slope and sides. Scutellum small, smooth, shining. Elytra 1.55 times as long as the pronotum, cylindrical, sides subparallel to about the apical third, then feebly incurved, the apex broadly rounded, declivity beginning abruptly at about the apical fifth, steep, subcircularly depressed, the margin of the depression low but acute; disc finely seriate-punctate, only the 1st stria slightly impressed, stria punctures well separated and with short, fine hairs, the suture slightly raised, the other interstriae flat, smooth (in *M. tanganyikaensis* the discal interstriae are rugulose), very finely uniseriate punctate with long fine hairs, interstria 2 with a tooth-like tubercle on the upper margin of the declivity, very close to it a much smaller tubercle on interstria 3; declivital depression subnitid, glabrous, finely rather irregularly punctured, the suture only very feebly raised.

In one specimen the elytral interstriae become finely but distinctly uniseriate granulate before the summit of the declivity.

Holotype in the British Museum; paratypes in the British Museum, in the collection of the East African Agriculture and Forestry Research Organisation, and in the author's collection.

Uganda: Zika, in light trap, K. W. Brown coll., B 1751.

Mimips pilosellus sp. n.

Of the same general form as *M. biconicus* Schedl, 1938, but the elytra more densely punctured and the stria punctures with hairs.

1.7 to 1.9 mm long, 2.7 times as long as wide, brown tinged with black, the appendages yellowish. Frons in the male broadly depressed, not very shining, densely, finely punctured with moderately long, fine, erect hairs, usually with a pair of minute tubercles set side by side at the upper limit of the depression; frons in the female feebly convex, closely moderately finely punctured, with scattered fine, erect hairs. Mandible of the male with a black, shining nodule (sometimes indistinct) on the upper edge near the base. Pronotum 1.1 times as long as wide, the summit situated in front of the middle, the anterior slope obliquely convex, disc only weakly depressed behind the summit, sides subparallel in rather more than the basal half, then incurved, apical margin distinctly narrower than the base, very broadly rounded, without asperities; anterior slope moderately densely covered with low asperities, these not extending behind the middle at the sides, summit with dense, weak transverse rugosities, basal area subnitid, densely, deeply, moderately finely punctured, the median line sometimes impunctate but not raised; pubescence of fine, moderately long, yellow hairs on the anterior slope and sides, shorter hairs on the basal part of the disc. Scutellum small, rounded, shining. Elytra 1.4 times as long as the pronotum, sides subparallel to about the apical third, apex rounded, disc cylindrical, declivity beginning behind the apical third, very abrupt and steep, broadly, feebly depressed, its outline forming more than a semicircle, its margin acute only in the upper part and armed on the 2nd interstria with a blunt, black tubercle; disc subnitid, moderately finely but deeply, closely seriate-punctate, the striae not impressed, their punctures with fine, inclined hairs, the interstriae flat, uniseriate punctate, punctures almost as large and almost as numerous as those of the stria but with longer fine hairs, the differentiation of striae and interstriae not conspicuous and the whole sculpture somewhat rough; on the declivity the suture very feebly raised, the remainder densely, moderately finely punctured and with moderately long, fine, erect, pale hairs.

Holotype (male) and 11 paratypes in the Leiden Museum; 3 paratypes in the author's collection.

Ivory Coast: Adiopodoume, September 1962 to January 1963, on sticky cloth traps, L. Brader coll., types.

Ghana: Kumasi, in light trap, 30.i.1960, 27.i.1961, 30.v.1962, F. G. Browne coll.; Samreboi, at light, 1.ix.1962.

Uganda: Mpanga, light trap, K. W. Brown coll.

Mimips robertsi sp. n.

The largest known species of the genus. *M. major* Schedl, 1963, is apparently related, but is smaller (length 2.9 to 3.6 mm), and, according to

the description, the upper margin of its elytral declivity forms a transverse ridge, of which there is no trace in *M. robertsi*.

4.0 to 4.6 mm long, 2.8 times as long as wide, brown tinged with black, upper part of the frons in the holotype (male?) with a weak, large, transverse elliptical convexity, this swelling matt, minutely reticulate, impunctate, its lateral limit marked on each side by a small tubercle, lower part and sides of the frons weakly depressed, subnitid, moderately finely punctured, with long, fine, erect hairs; frons in one paratype (female?) almost flat, broad, subopaque, minutely reticulate, finely and not densely punctate, with long, fine erect hairs towards the sides. Epistome broadly emarginate medially, the upper limit of the emargination defined by a weak, shining black carina. Eyes and antennal club of moderate size. Pronotum nearly 1.2 times as long as wide, widest at about the basal third, the sides subparallel from the obtuse basal angles to about the basal third, then evenly incurved, the apex much narrower than the base, but broadly rounded, subtransverse medially, without distinct armature, the disc feebly but distinctly depressed behind the summit, which is situated at about the middle; anterior slope obliquely convex, covered with small, rounded, not very dense asperities, these extending almost to the basal third at the sides, replaced on the summit by dense, weak, transverse rugosities, basal part of the disc subnitid, moderately densely, rather strongly punctured, an impunctate median line sometimes evident; anterior slope and sides with long, fine, erect, yellow hairs. Scutellum small, triangular, black. Elytra 1.4 times as long as the pronotum, sides subparallel to about the apical third, apex rounded (in one paratype the apices slightly separately rounded), disc cylindrical, declivity beginning a little behind the middle, abruptly truncate, its face subcircular, the upper part almost flat except for a large, weak median convexity, the lower part more depressed, somewhat reflexed, the margin of the declivity with a straight, conical, black tooth on the 2nd interstria, remainder of the margin crenulate, the crenulations stronger and broadly subtriangular on interstriae 3, 4 and 5, becoming weaker below; whole elytra subnitid, the disc strongly seriate-punctate, the striae not impressed, their punctures closely spaced, without hairs, the punctures of the 1st stria becoming very dense and slightly larger near the summit of the declivity, the interstriae flat, wider than the striae, interstriae 1 to 7 uniseriate punctate and glabrous or almost so, their punctures shallower and slightly smaller than, and about half as numerous as those of the striae, interstriae 8 and 9 densely, irregularly punctured with long, fine, erect yellow hairs similar to those of the pronotum; face of the declivity glabrous, densely, strongly, irregularly punctured.

The evident sexual dimorphism of the frons is not quite typical of the

genus and, without spare material for dissection, I cannot say with certainty which sex is which.

Holotype in the British Museum; a paratype in the collection of the Department of Forest Research, Ibadan, and another in the author's collection.

Nigeria: Oban, in light trap, 15.ii.1964, H. Roberts coll.

Mimips immunitis sp. n.

Very closely related to a species to be described by Schedl, but smaller, length 1.6 to 1.8 mm as compared with about 2.6 mm. The frontal depression of the male (female unknown) is subopaque, very finely punctured and with a fine median line, the depression surrounded by a crown of whitish hairs; in the type of Schedl's species the frontal depression of the male is subnitid and strigose, the pubescence sparser and reddish brown.

Male. — 1.6 to 1.8 mm long, nearly 2.7 times as long as wide, dark brown, not very shining, the appendages yellowish brown. Frons flat, matt or almost so, densely, minutely punctured with a fine median line, and surrounded by a crown of moderately long, whitish, slightly incurled hairs. Mandible without distinctive characters. Antennal club large, subcircular. Pronotum scarcely longer than wide, widest near the base, feebly depressed behind the summit, which is situated just in front of the middle, sides subparallel in the basal half, then incurved, apex separately, very broadly rounded, subtransverse, with some irregularly spaced, minute asperities, anterior slope densely finely asperate, the asperate patch not reaching the sides, basal area moderately densely, finely granulate punctate with traces of a narrow, smooth median line, the punctures less granulate towards the sides; pubescence of fine, rather short, whitish hairs over the entire surface, but not very dense. Scutellum very small. Elytra about 1.6 times as long as the pronotum, the sides subparallel to about the apical third, the apex rounded, disc cylindrical, declivity beginning at about the apical fourth, steeply convex in profile, feebly longitudinally depressed up to the 3rd interstria; disc densely, finely punctured, the striae and interstriae distinguished mainly by the whitish hairs, the hairs of the striae punctures short, fine and subrecumbent, those of the interstriae longer, stronger, and more erect; on the declivity the suture not raised, the punctures minute but the pubescence as on the disc, the lateral convexities without teeth or tubercles.

Holotype in the Leiden Museum; two paratypes (one badly damaged) in the author's collection.

Ivory Coast: Adiopodoume, 22.x.1962, 12.xi.1962, 31.xii.1962, on sticky cloth traps, L. Brader coll.

Xyleborus metacrucifer sp. n.

Closely related to *X. crucifer* Hagedorn, 1908, but smaller, the posterior part of the pronotum distinctly rugulose-punctate, the elytral disc weakly longitudinally depressed but without trace of a transverse, saddle-like depression, the elytral declivity scarcely evidently depressed and the interstitial tubercles relatively very small. It is probably even more closely related to *X. crucipennis* Schedl, 1963, which I have not seen, but according to its description *X. crucipennis* is still smaller and its pronotum is about as long as wide.

Female. — 4.8 mm long, 2.3 times as long as wide, reddish brown, the elytral declivity and the longitudinal depression of the disc of the elytra blackish. Frons weakly convex, rather densely rugose-punctate, with traces of a raised median line. Antennal club wider than long, obliquely truncate, the apical part of the anterior face with one corneous suture, the posterior face corneous except at the extreme apex. Pronotum nearly 1.2 times as wide as long, strongly convex, the summit well defined and situated just behind the middle, the base feebly sinuate, sides almost straight and very slightly convergent in about the basal two-thirds, the apex separately, very broadly rounded and unarmed, anterior slope densely covered with mixed large and small asperities, posterior area densely, weakly rugose-punctate; anterior slope and sides with rather long, fine hair, some hairs also on the basal part of the disc but these usually abraded. Scutellum rather small, dark, smooth, shining. Elytra 1.7 times as long as the pronotum, the sides subparallel in rather more than the basal two-thirds, apex rather broadly rounded and not margined; disc weakly convex in the basal third, then cylindrical except for a broad, longitudinal depression along interstriae 1 and 2, shallowly but distinctly seriate-punctate, the 1st and 2nd striae rather deeply impressed in the depression, interstria 1 subconvex with a row of widely spaced, small, setiferous tubercles which become gradually larger towards the summit of the declivity, the other interstriae broad, flat, finely and irregularly punctate and with fine hairs; declivity beginning at about the apical third, convex, scarcely evidently depressed along interstriae 1 and 2, the striae punctures very shallow, the interstriae flat, finely and irregularly punctate and each with a row of small tubercles bearing long, fine hairs, the tubercles most numerous but smallest on the sutural interstria.

Holotype and one paratype in the British Museum; one paratype in the collection of the East African Agricultural and Forestry Research Organisation, and one in the author's collection.

Kenya: Budongo, 25.x.1963, ex *Khaya*, holotype; 23.x.1963, ex *Celtis*; 27.x.1963 ex *Albizia*.

I have also seen a specimen (same locality, 18.x.1963, ex *Trema*) which is very possibly the male of this species, but the evidence is not conclusive. It is similar to the female, but smaller and decidedly stouter, with weaker sculpture.

Xyleborus granosus Schedl, 1957, description of male

Male. — 3.8 mm long, 2.3 times as long as wide, mainly subopaque, dark reddish brown. Frons wider than long, very finely punctured. Antennal club small, obliquely truncate. Pronotum as wide as long, sides subparallel (feebly curved) from the base to about the middle, then narrowed and triangularly produced to a strong, upturned point; surface, except the produced apex, strongly convex in profile, the anterior slope with a deep, oval depression, the lateral margins of which are convex, not acute; whole surface very finely rugulose, with some minute granules in the anterior depression, pubescence fine, sparse and inconspicuous. Scutellum small. Elytra distinctly narrower than the pronotum and 1.3 times as long, the sides subparallel from the base to about the middle, then very gradually incurved, the apex rounded and not margined, declivity beginning gradually at about the middle, obliquely convex; finely and shallowly seriate-punctate, the striae not impressed, the interstriae broad, flat, smooth, minutely uniseriate punctate, all becoming finely uniseriate granulate on the declivity, the granules of interstria 2 more numerous and a little larger than those of the other interstriae, pubescence inconspicuous.

Described from a single specimen, which has been deposited in the British Museum.

Uganda: Nabugutu Forest, 23.ix.1960, ex *Teclea* sp., in association with female; K. W. Brown coll., B 1496(a).

Xyleborus mpangae sp. n.

In general appearance rather similar to *X. agnaticeps* Schedl, 1957, but more closely related to *X. strombosiopsis* Schedl, 1957. The latter is distinguished by the sculpture of the three inner interstriae of the elytra, which are relatively strongly tuberculate at the summit of the declivity and also distinctly uniseriate tuberculate on the declivity itself. *X. agnaticeps* is most readily distinguished by its uniseriate punctate interstriae on the disc of the elytra, and by the presence of fine, erect interstitial hairs on the declivital face.

Female. — 2.1 mm long, 2.6 times as long as wide, cylindrical, entirely subnitid, brown to black, probably entirely black when fully coloured, the appendages yellowish. Frons broadly convex, very feebly punctured and with a fine, short, longitudinal median carina, pubescence fine and incon-

spicuous. Antennal club wider than long, obliquely truncate. Pronotum 1.15 times as long as wide, sides parallel from the base to beyond the middle, apex rather broadly rounded and with a long row of very low asperities, summit situated in front of the middle and not prominent, the anterior slope obliquely convex, densely, finely asperate, posterior part of the disc smooth, minutely and indistinctly punctured; whole surface with fine, rather short hair, more conspicuous on the anterior slope. Scutellum rounded. Elytra 1.35 times as long as the pronotum, sides parallel to about the apical fourth, apices strongly, jointly rounded (in *X. strombosiopsis* there is a small sutural emargination), and acutely margined up to the 7th interstria, disc cylindrical, declivity beginning behind the apical fourth, abruptly truncate, its face sub-circular, irregularly subconvex, more strongly so near the suture towards the apex; disc finely seriate-punctate, the striae on the greater part not at all impressed, but the 1st to 5th striae becoming sulcate near the summit of the declivity, no striae hairs, interstriae wider than the striae, flat, smooth, more finely, irregularly biseriate punctate with rather short, inclined, pale hairs, at the summit of the declivity interstriae 1 to 6 each with several moderately strong tubercles arranged in a single row; on the face of the declivity the striae punctures coarse and deep, the interstriae consequently narrow and finely granulate or granulate-punctate, pubescence of the declivity extremely short, sparse, fine and indistinct. Front tibia widened to a very obliquely truncate apex, the outer edge with numerous small teeth.

Holotype in the British Museum; a paratype in the collection of the East African Agricultural and Forestry Research Organisation.

Uganda: Mpanga, 23.x.1958, in light trap, K. W. Brown coll., B 618(g), holotype; B 615(b), paratype.

***Xyleborus murudensis* sp. n.**

Closely related to *X. bicolor* Blandford, 1894, but considerably larger and the 2nd elytral interstria distinctly tuberculate on the declivity.

Female. — 2.8 mm long, 2.8 times as long as wide, mainly subnitid, blackish brown, the appendages and much of the ventral surface yellowish. Frons convex, almost smooth, with scattered, moderately large, deep punctures, pubescence fine, sparse and inconspicuous. Eye deeply emarginate. Antennal club distinctly obliquely truncate, the thickened basal part occupying about one-third of the anterior face. Pronotum 1.1 times as long as wide, moderately strongly convex, the summit situated at the middle, sides sub-parallel in the basal half, then rather strongly convergent, the apex much narrower than the base but broadly rounded, subtransverse medially, the anterior slope, and the sides to about the basal third, covered with low,

broad asperities, summit densely rugose, the basal part of the disc smooth, shining, with sparse, moderately fine punctures; pubescence fine and inconspicuous, mainly on the anterior slope and sides but a few hairs (sometimes abraded) also on the basal part of the disc. Scutellum shining, impunctate. Elytra 1.7 times as long as the pronotum, sides subparallel to about the apical third, the apices strongly, separately rounded, thus forming a broad, shallow sutural emargination, the apical margin fine, acute up to the 7th interstria, disc cylindrical, declivity beginning gradually at about the middle, obliquely convex; disc finely seriate-punctate, the striae not impressed, their punctures separated by spaces about equal to their diameter, the interstriae flat, smooth, uniseriate punctate, their punctures almost as numerous as those of the striae but much smaller; declivity appearing less shining than the disc because of its sculpture, the interstitial punctures subgranulate with fine, moderately long hairs, each interstria in addition with several small tubercles.

Holotype and paratypes in the British Museum; a paratype also in the author's collection.

Sarawak: Foot of Mt. Murud, E. Mjöberg coll.

***Xylosandrus brevis* (Eichhoff) comb. nov.**

I have two specimens of *Xyleborus brevis* Eichhoff (1877, Deuts. ent. Zeitschr. **1877**: 121), determined by Dr. Akira Nobuchi, from Japan. The anterior coxae are distinctly separated by a broad, obtuse prosternal process. The species is to be referred to *Xylosandrus* Reitter.

***Xylosandrus ramulorum* (Schedl) comb. nov.**

From Schedl's original description and figure (1957, Ann. Mus. R. Congo belge 8 (Zool.) **56**: 115) and Nunberg's additional notes, especially on the separation of the anterior coxae (1963, Ann. Mus. R. de l'Afr. centr. 8 (Zool.) **115**: 47), it is clear that *Xyleborus ramulorum* cannot be referred to the "*Xylebori truncati*", but that it is a strongly characterised *Xylosandrus* of the group in which the elytral declivity is abruptly truncate.

***Webbia* Hopkins**

I recently proposed (Browne, 1963, Ent. Ber. **23**: 57) that the genus *Xyleborus* Schedl, 1939, should be treated as a synonym of *Webbia* Hopkins, 1915, and that the diagnosis of the latter should be extended to admit either 3 or 4 segments in the antennal funicle. Dr. K. E. Schedl has objected to this proposal for the sake of strict adherence to the funicle rule, — see my discussion on *Acacis* earlier in this paper.

Among the species that are most closely related to *W. dipterocarpi* Hop-

kins, the type of the genus, specimens of *W. duodevigintispinatus* Sampson, *W. quatuordecimspinatus* Sampson, and *W. bakoensis* Browne all show a distinctly 4-segmented funicle. So do two specimens of *W. costulatulus* Schedl, and a species from Sarawak (Schedl in press) which has no very close relations, although its general form approximates to that of a typical *Xelyborus*. In another species-group, a specimen of *W. cornutus* Schedl shows 4 fairly distinct segments although both the 3rd and 4th are very short; in two specimens of *W. cylindricus* Schedl, the 4th segment is vestigial in one and completely lacking in the other; while two specimens of *W. talauticus* Eggers show no trace of a 4th segment. An imperfectly separated 4th segment is present in one specimen of *W. biformis* Browne, and also in one of *W. obtusispinosus* Schedl, but in another specimen of the latter there is no trace of a 4th segment.

This variation in a small sample clearly prohibits a strict definition of the segmentation of the funicle within the genus; and the value of the funicle as a key character is in any case diminished by the fact that a 4th segment, even when present, is often so short that it cannot be seen without removing the antenna and examining it at high magnification. However, should it prove desirable to use the funicle as a key character for *Webbia* (including *Xelyborus*), it can still be done; as far as is known, the segmentation appears to be reasonably constant in other Xyleborine groups, and the only other genus with typically less than 5 segments is *Cnestus*, which is readily distinguished from *Webbia* by other characters.

PLATYPODIDAE

NEW RECORDS FROM THE IVORY COAST

Dr. L. Brader's collections from Adiopodoume contain the following species that have not previously been recorded from the Ivory Coast. It is possible, however, that records from this country are included in Schedl's "Scolytidae und Platypodidae Afrikas" (Platypodidae not yet published at time of writing).

Periommatius piceus Strohmeyer

Platypus linearis Stephens

Doliopygus subditivus Schedl

SYNONYMICAL NOTES AND DESCRIPTIONS

***Platypus ugandae* sp. n.**

An easily recognisable little species, evidently to be placed in Chapuis' group *Platypi platyuri*. Besides being the only member of the group so far found on the African continent, it is much smaller than any known

species, the elytral striae are not at all impressed, and the apical processes of the elytra are very short.

Male. — 3.0 mm long, 4.0 times as long as wide, yellowish brown, the apex of the elytra darker. Frons flat, subnitid, rather finely punctured, with short, erect hairs, rounded into the vertex, which is smooth and subimpunctate, its median line fine and not raised. Pronotum nearly 1.2 times as long as wide, smooth and subnitid, subimpunctate, some fine punctures and rather short, pale hairs along the anterior margin, the median sulcus very fine, extending beyond the basal third, femoral grooves angulate at their posterior extremity. Elytra 2.1 times as long as the pronotum, the bases scarcely raised and the bases of the discal interstriae not rugose or granulate, sides subparallel to about the apical third, then incurved, each elytron only weakly produced to form a short, broad process with a subtruncate apical face, these processes slightly divergent so that the shallow space between them is very broadly trapezoidal when viewed from above; surface cylindrical from the base to about the apical fourth, the declivity very obliquely convex; disc very finely seriate-punctate, the striae not at all impressed, the interstriae broad, flat, smooth, subimpunctate; on the declivity the interstriae become moderately finely uniseriate tuberculate, the tubercles strongest on interstriae 8 and 9, weak and few on interstriae 4 to 7, all the tubercles associated with fine, short hairs, towards the apex the suture just perceptibly raised and shining, the dorsal, inner and apical surfaces of the apical processes irregularly, minutely granulate.

Holotype in the British Museum; a paratype in the collection of the East African Agricultural and Forestry Research Organisation.

Uganda: Zika, in light trap, 5.vi.1961, K. W. Brown coll., B 1732(a).

Platypus biflexuosus Schedl, 1962, description of female

The female of this species is easily distinguished from all other *Platypus* females known to me by the broad, longitudinal band of minute pores on the pronotum; the same character, but less developed, occurs in the male.

Female. — 3.6 mm long, about 3.7 times as long as wide, dark brown, the disc of the elytra pale testaceous. Frons almost flat, subnitid, almost impunctate and glabrous. Vertex subopaque, finely rugose-punctate with moderately long, yellow hair, median line shining and feebly raised. Pronotum 1.25 times as long as wide, femoral grooves angulate at both extremities; median sulcus long, extending to the middle and continued forwards as a feebly depressed line, flanked on each side, along its entire length, by a broad, matt band of very dense, minute punctures, remainder of the disc irregularly, very finely punctured, some piliferous punctures along the

anterior margin. Elytra nearly 1.7 times as long as the pronotum, the base not raised, sides subparallel to the apical fourth, then slightly incurved, the apex subtransverse, disc cylindrical, apical face vertical, on each side a little wider than high; disc subnitid, very finely seriate-punctate, 1st stria very feebly impressed, interstriae broad, flat, subimpunctate except near the apex where they bear fine, short hairs, bases of interstriae 3 and 5 raised and rugose; apical face matt, finely rugose-punctate with fine yellow hairs.

Described from a specimen in the British Museum.

Assam: U. Dihing F.R., 26.vi.1921, C. F. C. Beeson, ex seeds of *Dipterocarpus pilosus*.

The record from seeds is a remarkable one, and requires confirmation. An accompanying male specimen from the same locality, dated 19.vi.1921, is simply recorded as "ex *Dipterocarpus pilosus*". Both are labelled "Meso-platypus besoni, sp. n., type, Smpls. det.". The British Museum also has a male specimen from Siam, Renong, without further details.

Triozastus elongatus Schedl, 1954, description of female

Female. — 3.1 mm long, about 4.2 times as long as wide, yellowish to reddish brown. Frons flat, above the level of the antennae subopaque, very densely, shallowly reticulate-punctate, below shining, with deep, moderately small punctures of varying size; frontal grooves poorly developed, represented on each side by a shallow, broadly oval to subcircular depression, only its lower border distinctly raised and acute, the depressions separated by a space rather wider than their diameter. Vertex subopaque and finely punctured, with a shining median line and a shining space on each side. Pronotum 1.25 times as long as wide, widest at the posterior extremities of the femoral grooves, both extremities of the grooves angulate, disc almost smooth, subnitid, minutely, irregularly and not densely punctured, median sulcus fine, extending not quite to the middle of the disc. Elytra scarcely wider than the pronotum and nearly 2.0 times as long, the disc longitudinally horizontal, only weakly declivous towards its apex, the vertical apical face of the combined elytra more than twice as wide as high; disc finely seriate-punctate, only the 1st stria weakly impressed, stria punctures rather numerous, interstriae flat, smooth and subimpunctate, interstriae 1, 2 and 3 raised at the base, the base of interstria 3 also widened and rugose, striae ending at about the apical sixth, where the surface becomes rugulose and finely pubescent, the vertical apical face subopaque and indistinctly granulate. Abdominal ventrites subimpunctate, the 2nd ventrite without a pore-like structure.

According to the one available specimen, the species is distinguished from

other known females of the genus by its small size and slender form, and more particularly by the very shallow frontal grooves.

Described from a specimen in the author's collection.

Ghana: Bobiri, 22.iv.1960, F. G. Browne coll., 6642, in association with the male.

Mesoplatypus Strohmeier

Schedl (1963, Beitr. Ent. **13**: 483-484) has adversely criticised my brief diagnosis (Browne, 1962, Ann. Mag. nat. Hist. (13) **4**: 649) of *Mesoplatypus*, but it still seems to me that it will serve very well. The numerous additional characters discussed by Dr. Schedl are specific, not generic.

Doliopygus angolensis Schedl and **D. malkini** Schedl

Owing to an unfortunate error in identification, for which I am not responsible, my notes on the distribution and habits of *Doliopygus malkini* Schedl (Browne, 1963, Bull. ent. Res. **54**: 261) really refer to *Doliopygus angolensis* Schedl, 1959. The known distribution of this subspecies, or more probably species, extends from Ghana to Angola.

The true *D. malkini* Schedl, 1957, does occur in Ghana. I have a few specimens taken in a light trap, 3.x.1960, at Kintampo, in the more southerly part of the Guinea savannah forest.

Doliopygus umbonatus sp. n.

An easily recognised species of Schedl's group *Doliopygi costipenni*. In all previously known species of this group the 5th abdominal ventrite is either without distinctive characters or else bears a median pair of tubercles; in *D. umbonatus* the 5th ventrite bears a large, boss-like median swelling.

Male. — 3.1 mm long, 3.4 times as long as wide, subnitid, reddish brown above, the apex of the elytra blackish, the appendages and much of the ventral surface yellowish brown. Frons almost flat, subnitid, the upper half densely, finely punctured and with long, fine hairs, the lower half feebly depressed and much more sparsely punctured, the median striga small and weak; vertex subnitid, with a finely corroded sculpture, the median line slightly raised. Pronotum 1.15 times as long as wide, subnitid, mainly smooth, minutely wrinkled towards the apex, punctures very fine and rather sparse, stronger along the apical margin, the median sulcus fine, extending a little beyond the basal third, femoral grooves angulate at their posterior extremity. Elytra 1.6 times as long as the pronotum, widest near the apex, form as in the related species, striae scarcely impressed except near the apex, their punctures rather fine but well defined, the interstriae flat, smooth, irregularly and very finely uniseriate punctate, all the interstriae except 4 and

6 ending in short, broad, blunt teeth, the tooth of interstria 3 the longest and subtriangular, the vertical apical rim of the elytra shining, divided on each side by a longitudinal carina opposite interstria 3. Second abdominal ventrite strongly produced, its apical margin rather weakly and irregularly crenate, its concave face shining and subimpunctate; the 3rd, 4th and 5th ventrites also shining and subimpunctate, the 5th large but only feebly concave, furnished medially with a prominent, rounded boss.

Holotype in the British Museum; a paratype in the author's collection.

Ghana: Kumasi, 6.i.1962, F. G. Browne coll.