

ANNALEN VAN HET MUSEUM
VAN BELGISCH CONGO
TERVUREN (BELGIË)

Reeks in 8°

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Contribution to the Knowledge

OF THE

Epitragini-Genus Himatismus

(The Tenebrionidae of Southern Africa. II)

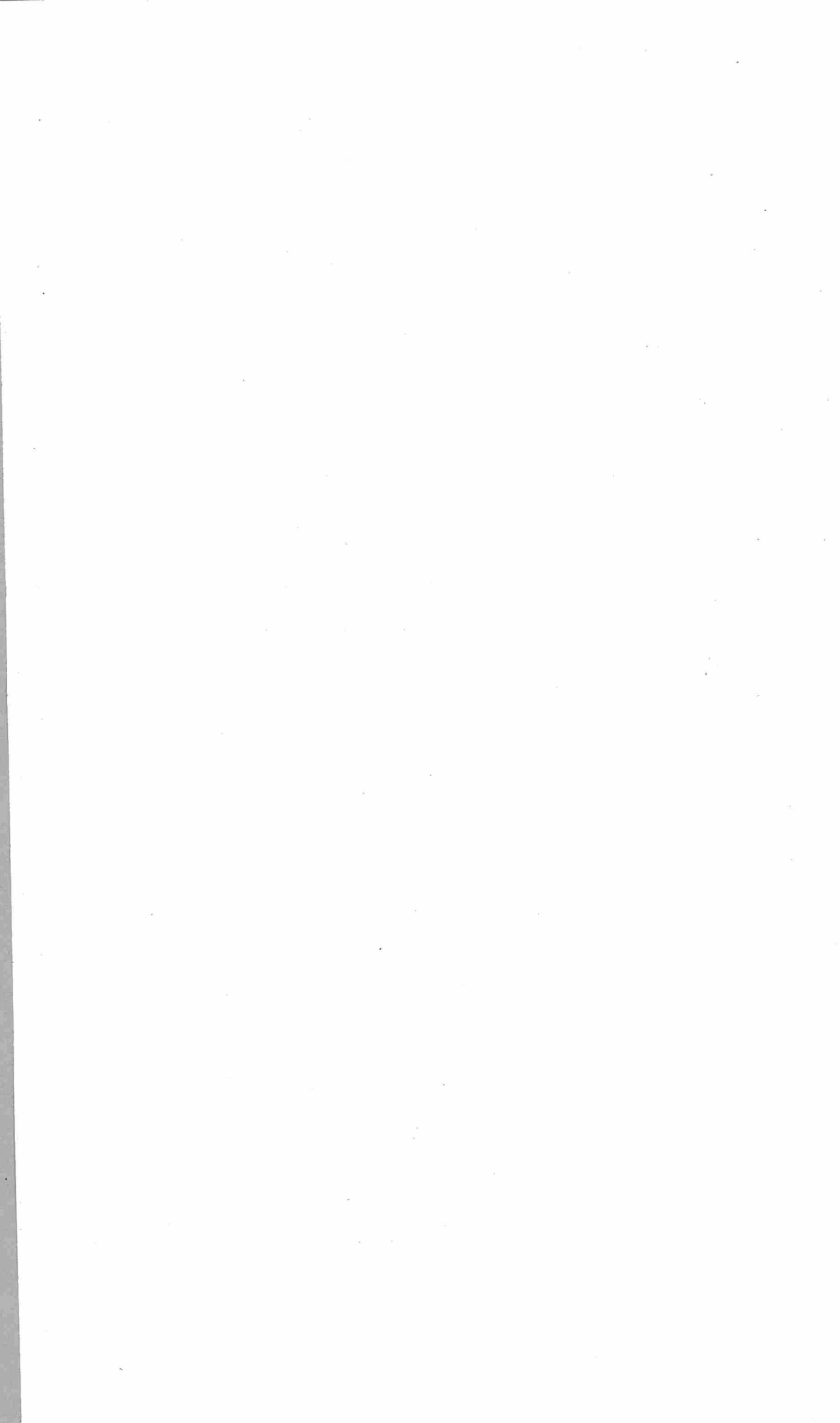
BY

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Department of Entomology, Transvaal Museum

With 12 plates

TERVUREN
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While presenting this paper to the Musée du Congo Belge at Tervuren, I have to acknowledge the great assistance received from the South African Council for Scientific and Industrial Research, which enabled me to carry out my studies on the *Tenebrionidae* of Southern Africa.

In several widely spread groups of African *Tenebrionidae*, however, the study of the South African forms can only be satisfactory if all the other African species are taken in consideration. The fauna of the eastern parts of the Union of South Africa (Natal, Zululand, Transvaal), as well as that of Bechuanaland and the northern parts of South-west Africa, are closely connected with the fauna of the territories south of the Sahara; therefore it is impossible to recognize the correct systematic position of the South African species without pointing out their relationship to the nearest allied forms of the northern faunae, which for the greater part were either unknown or insufficiently described.

Many African Museums and European Institutes have sent to me their respective materials for study; I feel especially indebted to the Musée du Congo Belge, for having entrusted me their entire precious materials of *Tenebrionidae*.

I owe many thanks to Dr H. SCHOUTEDEN and Mr P. BASILEWSKY of the Musée du Congo Belge, to Dr K. H. BARNARD and Dr A. J. HESSE of the South African Museum, to Mr E. C. G. PINHEY of the Coryndon Museum at Nairobi, to Dr W. FORSTER of the Zoolog. Staats-Sammlung at Muenchen, and to Dr R. MALAISE of the Naturhistoriska Riksmuseum, Stockholm, for having presented the Transvaal Museum with several holo- and paratypes.

The abbreviations used in the present paper refer to the collections where the examined specimens are preserved:

BCM = Musée du Congo Belge; S.A.M. = South African Museum; T.M. = Transvaal Museum.

Before giving the following descriptions I should like to emphasize some facts which greatly change our knowledge of the genus *Himatismus*.

a. — The genus *Curimosphena* GEBIEN has to be considered as a subgenus of *Himatismus* (cfr. KOCH, Annals Transvaal Museum, XXI, 1950, 284).

b. — The two species *emarginatus* HAAG and *raucus* HAAG, described as *Himatismus* and hitherto considered as such, have to be placed to the genus *Cyphostethe* (cfr. KOCH, Annals Transvaal Museum, XXI, 1950, 287-288).

c. — The Indian *H. fasciculatus* F., represented by a special form (*luctuosus* FAIRM.) on the island of Madagascar, occurs also on the African continent in Port. East Africa; thus all species of the genus occur in Africa.

d. — There is a supposition that some of the *Himatismus* are noxious beetles. According to the records of habits I have received from the Entomological Branch of the Department of Agriculture at Salisbury, as well as from the National Collection of Insects at Pretoria, *H. fasciculosus* GEBIEN has been found in some quantity in both peach and apple trees in Umtali (Southern Rhodesia), and *patruelis* BERTOLONI in citrus deadwood in White River (Northern Transvaal). No trustworthy observations whether the beetles do some damage could be obtained. Unfortunately nothing is known about the biology of the *Himatismus*. My own observations in the field are very scarce and refer to the following habits: most of the *Himatismus* are attracted at night by artificial light; in Ovamboland I collected great numbers of *H. Goetzelmanni* on the branches of acacias, where they were sitting, often together with *Cetonidae*, *Elateridae*, *Hymenoptera* and *Lepidoptera*, around the resinous spots of the trees; when threatened they were quickly trying to hide running around the branch (a habit well known in many weevils); in Luanda (Angola) I collected fresh and young specimens of *H. tessulatus* at the root of wild plants of the sandy dunes of the sea shore, where I dug them out from the sand; in Egypt large quantities of *H. villosus* have been observed on the stem and the branches of acacias and tamarisks, while sitting in the cracks of the bark. I have never seen *Himatismus* under stones; on the other hand many species of the genera *Derosphaerius*, *Cyphostethe* and *Aphrotus*, which all are closely related to *Himatismus*, occur frequently under stones (1).

DESCRIPTIONS

***Himatismus (Curimosphena) rhodesianus*, nov. spec.**

Female unknown; male: Reddish brown with the extremities paler; dull, pilose. — Head above densely covered with transverse strigae anteriorly, becoming longitudinal towards base and resolved into round or slightly elongate punctures on a small patch at middle of vertical base. Central lobe of epistome triangular. Eyes large and strongly projecting beyond lateral outlines of head, with rotundate contours; their longitudinal diameter as long as genae and longer than the transverse diameter. Tempora distinct. Apical joint of maxillary palpi very strongly securiform, with the apical margin twice as long as the inner lateral margin. Antennae elongate, extending beyond basal quarter of elytra, with all joints elongate; the preapical joint one and a half times as long as broad; the apical joint oblong and oval, almost as long as the previous joint. — Pronotum one-third broader than long, of a transversely rectangular shape; with subparallel sides, which are very slightly narrowed towards anterior margin and less so towards the base; broadest before middle. Integument densely covered with round and partly confluent punctures, with the intervals between punctures much narrower

(1) Recently Dr. H. PRIESNER, Cairo, published a very interesting note about the sound producing of the ♂ of *H. (Curim.) villosus* HAAG (cfr. PRIESNER, 1949, Bull. Soc. Fouad 1^{er} Entom., XXXIII, p. 11-12).

than diameter of punctures. Lateral edge well-pronounced, but not carinate. Middle of prosternum with a setiferous fovea, encircled by a duplicate carina. Prosternal apophysis bent downwards in a rather steep angle. — Elytra with obtuse shoulders; between the densely punctured primary rows covered with a fine and rather dense punctation on even intervals, whereas the alternate ones show a very dense and rugose punctation between tessellate spots. Underside of afterbody finely and rather densely punctured. Anal sternite slightly impressed at middle. Legs elongate; tibiae straight, with the underside of anterior tibiae excavate; basal joint of posterior tarsi distinctly longer than unguis joint; trochanters of anterior femora without spine.

DIMENSIONS. Length 13 1/2 mm.; width 4 1/2 mm.

LOCALITY. Southern Rhodesia, Melssetter district, 4 Dec. 1928, leg. R. H. STEVENSON (1 male, holotype in South African Museum).

See Plate I, fig. 1.

A further male from Salisbury (21 Dec. 1911, ex coll. Division of Entomology of the Department of Agriculture, Salisbury) differs from the holotype in the narrower pronotum; the latter is almost square, only little broader than long.

SYSTEMATIC POSITION. The new species belongs to the *maculisparus*-group; this group is characterized by the absence of the trochanteral spines in the male, the reflected prosternal apophysis, the elongate antennae, the elongate basal joint of posterior tarsi, the prominent eyes, the prosternal fovea in the male, and by the punctate and not striolate pronotum. Hitherto only the leading species of this group was known, that is *maculisparus* LESNE, 1920, occurring in the northern parts of East Africa; from this species *rhodesianus* is readily to distinguish by the strongly securiform apical joint of the maxillary palpi in the male (simply broadened and subtriangular in *maculisparus*) and the considerably denser pilosity of the elytra.

***Himatismus (Curimosphena) marginatus*, nov. spec.**

Blackish brown, with the antennae, maxillary palpi and tarsi often reddish brown; dull, pilose. — Head transverse, above covered with transversely confluent strigae and with a shiny impunctate spot at middle of vertical base. Central lobe of epistome triangular, obsoletely separated from lateral portions of epistome. Eyes large, strongly projecting beyond cephalic outlines, with subconical contours, and, viewed from above, with the transverse diameter about one and a half times as long as the longitudinal one. Genae subparallel and longer than eyes. Tempora minute, but distinct. Apical joint of maxillary palpi in the male strongly securiform, with the apical margin twice as long as the inner lateral margin; in the female simple, with the apical margin about as long as the inner lateral margin. Antennae elongate, extending beyond basal quarter of elytra in the male, distinctly shorter in the female; all joints elongate, the preapical one hardly longer than broad, the apical joint glandiform, about as long as the previous one. — Pronotum one and a third times as broad as long, broadest before middle, rounded

and narrowed towards the anterior margin, slightly sinuate in front of posterior angles or there subparallel. Posterior angles rectangular and minutely prominent. Lateral edge well-defined, rather sharp, carinate and complete. Integument covered with a very dense and coarse punctation, becoming transversely confluent on disc, with the intervals between punctures raised to a fine reticulation. Middle of prosternum in the male with a setiferous fovea and annular carina. Prosternal apophysis sharply bent downwards. — Elytra with obtuse shoulders and tessellate, densely punctured primary rows; the intervals 1, 2, 4, 6 and 8 shiny and showing a fine and rather sparse punctation, the remaining with a coarser and denser punctation between the tessellate spots, becoming very concentrated towards sides. Underside of afterbody shiny, with fine and rather dense punctures. Anal sternite in the male with a slight impression at middle of apical half. Legs elongate; tibiae straight, with the underside of anterior tibiae excavate; the basal joint of posterior tarsi distinctly longer than the unguis joint; trochanters of anterior femora without spine.

DIMENSIONS. Length 13 1/2 to 15 mm., width 4 1/4 to 4 1/2 mm.

LOCALITY. Southern Rhodesia, Livingstone, leg. POWELL (2 males, 4 females, holo- and allotype in South African Museum, paratypes ibidem and in Transvaal Museum).

See Plate I, fig. 2.

SYSTEMATIC POSITION. *H. marginatus* is another new species of the *maculisparsus*-group; it stands near to *rhodesianus* because of the strongly securiform apical joint of the maxillary palpi in the male, differing, however, from this species in the distinct and complete margination of pronotum, the more transverse and laterally rounded shape of the latter, and the much more prominent, subconically projecting eyes; the transverse diameter of eyes is much longer than the longitudinal one, whereas it is shorter than that in *rhodesianus*.

Himatismus (Curimosphena) Barnardi, nov. spec.

Above blackish brown, underside and appendages reddish brown, moderately shiny, pilose. — Head above densely covered with transverse strigae and with an impunctate small spot at middle of vertex. Central lobe of epistome triangular. Eyes strongly prominent, with their outlines strongly rotundate and showing a slight tendency to become subconical; the transverse diameter only a little shorter than the longitudinal one, the latter longer than genae. Tempora distinct. Apical joint of maxillary palpi in the male slightly securiform, with the apical margin about one and a half times as long as the inner lateral margin (fig. a). Antennae elongate, extending beyond basal quarter of elytra; all joints elongate, the penultimate joint a little more than one and a half times as long as broad, distinctly shorter than the oblong and oval apical joint. — Pronotum one and a third times as broad as long, considerably broader than head, distinctly rounded and narrowed towards the anterior margin, slightly sinuate in front of posterior angles and broadest before middle. Integument covered with a very dense

and coarse, round punctation, slightly confluent laterally, with the intervals between punctures much narrower than diameter of punctures. Lateral edge well-developed and complete. Middle of prosternum in the male with a setiferous fovea, encircled by a simple annular carina. Prosternal apophysis sloping downwards. — Elytra shiny, with obtusely rounded shoulders; tessellate, with densely punctured primary rows, and rather sparsely and finely punctured intervals. Underside of afterbody with fine and moderately dense punctuation. Anal sternite with broad roundish impression on apical half and with a minute incision at middle of the acies of apical margin. Legs elongate; tibiae straight, with the underside of anterior tibiae in the male



Fig. A. — Head with maxillary palpi, of a male of *H. Barnardi* n. sp.

smoothened and slightly concave; basal joint of posterior tarsi distinctly longer than the unguis joint; trochanters of anterior femora without spine.

DIMENSIONS. Length 10 to 11 mm., width 3 1/4 mm.

LOCALITIES. South-west Africa, Etosha Pan, Nomtele, 1921, leg. K. H. BARNARD (1 male, holotype in South African Museum); Ovamboland, leg. ERIKSSON, 1890-1891 (1 male, paratype in Transvaal Museum).

I name the new species in honour of Dr K. H. BARNARD, director of the South African Museum, Cape Town.

See Plate II, fig. 3.

SYSTEMATIC POSITION. The new species belongs to the *maculisparvus*-group, but shows at the same time rather well-pronounced connections to the *vestitus*-group in spite of the presence of the prosternal fovea in the male. It differs from both the previous species in the much more rounded

and narrowed sides of the anterior third of pronotum (in this particular resembling *vestitus*), the less securiform apical joint of the maxillary palpi in the male, the very elongate antennae, with the apical joint being distinctly longer than the penultimate joint, and in the smaller size.

Himatismus (Curimosphena) Basilewskyi, nov. spec.

Of a dark reddish brown, the tarsi, antennae and trophi paler, partly testaceous, the underside of pro- and mesothorax red to orange; dull, pilose. — **H e a d** transverse, above with a slightly triangular impression at middle; densely covered with transversely confluent, rugose punctures, becoming longitudinal towards sides and there with the intervals between punctures raised to fine longitudinally reticulate ridges. Central lobe of epistome triangular, slightly separated from the lateral portions of epistome. Eyes strongly rotundate, strongly projecting beyond cephalic outlines, only little longer than broad, of about the length of the genae. The latter slightly rounded and with a minute, sharp incision in front of eyes. Tempora minute, narrowed towards neck. Apical joint of maxillary palpi small and simple, shorter than the longitudinal diameter of eyes, in the male very little shorter and broader than in the female. Antennae slender and moderately elongate, extending beyond pronotal base, slightly accrescent and compressed towards apex; third joint the longest, a little more than twice as long as broad and one-third to one-half longer than the fourth joint; the intermediate joints elongate; the penultimate joint in the male distinctly longer than broad, in the female as long as broad and triangular; the apical joint glandiform, a little shorter than the previous one, in the male longer than broad, in the female as long as broad. — **P r o n o t u m** transverse, broadest before middle, there broader than head, one and a third times as broad as long, with the sides rounded and narrowed towards apical margin, gradually and straightly narrowed towards base and minutely sinuate in front of posterior angles. Anterior margin straight, immarginate, with the lateral angles obtusely rounded. Base bisinuate, obsolete marginate, much broader than anterior margin, with minutely prominent acutangular lateral angles. Lateral edge sharp and complete. Integument covered with an extremely dense and coarse, almost confluent and round punctation throughout, without showing the tendency to become scattered along midline, with the intervals between punctures raised to a fine and uniform reticulation. Middle of prosternum in the male smooth, slightly raised and on centre with a roundish, rather spacious setiferous fovea, which is subcarinate peripherally. Prosternal apophysis with the apical portion gradually and obliquely sloping downwards. — **E l y t r a** with well-developed shoulders and distinctly punctate primary rows; the two sutural intervals and the following alternate ones rather shiny, with scattered punctures and continuous pilosity, whereas the remaining intervals are dull and covered with a dense and rugose punctation between the tessellate spots. Underside of afterbody with rather dense and fine punctures, moderately pilose; mesosternum with dense, transversely confluent punctation. Anal sternite in the male with a longitudinal impression at middle of

apical half. Legs slender; trochanters of anterior femora simple in both sexes, without spine; tibiae straight; anterior tibiae with the contours of the outer margin sinuate in front of the prominent and acute apical angle, very similar in both sexes, in the male a little more compressed and subcarinate underneath; basal joint of posterior tarsi distinctly shorter than unguis joint.

DIMENSIONS. Length 8 1/4 to 11 mm., width 3 to 4 1/4 mm.

LOCALITIES. Belgian Congo. — Moyen Kwilu, Leveville, leg. P. VANDE-RIJST (1 male, 5 females, holo- and allotype in Musée du Congo Belge, paratypes ibidem and in Transvaal Museum); Kasai, Kondué, leg. E. LUJA (1 female, BCM); Kasai, X.1924, on cotton, leg. Lt. J. GHESQUIÈRE (1 female, BCM); Kunungu, Rev. Nkele, 1930, ex coll. SCHOUTEDEN (1 female, BCM).

I dedicate the new species to Mr P. BASILEWSKY, Chief of the Entomological Department of the Musée du Congo Belge at Tervuren.

See Plate II, fig. 4.

SYSTEMATIC POSITION. *H. Basilewskyi* is a quite isolate species, very specialized by the minute genal incision in front of the anterior margin of eyes, the gradually sloping prosternal apophysis, the peculiar formation of the underside of the anterior tibiae and the simple apical joint of the maxillary palpi in the male, and by the short basal joint of the intermediate and posterior tarsi. To simplify the classification it may be placed to the *maculisparvus*-group; it resembles a little *H. Barnardi* by the similar shape of the head and the eyes, but it is quite different from this species, besides the above mentioned particulars, in the broad and more densely sculptured, dull elytra, the more rounded pronotum and the stout and shorter antennae.

The proportions of the tarsal joints of the intermediate and posterior legs would place *H. Basilewskyi* to the *villosus*- and *Muelleri*-group; among the species of this group there is only *H. dubius* HAAG, 1870, which resembles superficially the new species, but it has the short antennae of the *villosus*-group, and in the male a securiform apical joint of the maxillary palpi and deeply excavate underside of the anterior tibiae.

***Himatismus (Curimosphena) transvaalensis*, nov. spec.**

Blackish brown, the appendages distally reddish; underside paler; dull, pilose. — Head above densely covered with transverse strigae, becoming longitudinal towards inner margin of eyes, and with a small impunctate spot at middle of vertical base. Central lobe of epistome triangular, continuous with lateral portions of epistome. Eyes extremely projecting beyond cephalic outlines, strongly conical, with pointed contours and with the transverse diameter much longer than the longitudinal one; the latter shorter than genae. Apical joint of maxillary palpi in the male securiform, with the apical margin one and a half times as long as inner lateral margin, in the female simply dilated towards apex, with the inner lateral margin about one and a half times as long as apical margin. Antennae elongate, extending beyond basal quarter of the elytra, with all joints elongate; the penultimate joint one and a third times as long as broad, the apical joint glandiform, a little shorter than previous joint. — Pronotum large, broader than head,

broadest before middle, there hardly broader than long, with the sides rather strongly rounded and narrowed towards anterior margin, straightly narrowed towards base and slightly sinuate in front of posterior angles. Integument covered with very dense, coarse and slightly transverse punctures discally becoming longitudinal and confluent towards sides, with the intervals between punctures raised to fine longitudinal ridges laterally. Lateral edge obtuse, complete. Prosternum in both sexes simple. Prosternal apophysis bent downwards. — Elytra with well-developed, almost rectangular shoulders, densely punctured in the primary rows; the discal intervals with fine and less dense punctuation, the lateral intervals, especially between the tessellate spots, rugosely punctured. Afterbody underneath with rather dense and fine punctuation. Anal sternite in the male with broad impression on apical half, in the female with indicated longitudinal impression along midline. Legs slender and elongate; femora strongly clavate, with the trochanters of anterior femora inerme; underside of anterior tibiae in the male excavate and smoothed, with a strong tooth at distal end of the outer margin of excavation; intermediate tibiae with the inner margin slightly sinuate between middle and apex, the distal half of their underside in the male with a broad sulcus, the background of which is flattened and smoothed; underside of posterior tibiae in the male narrowly sulcate at proximal half, simply convex distally and there only with an obsolete, very narrow and dull impunctate line at middle. Basal joint of posterior tarsi a little longer than unguis one.

DIMENSIONS. Length 13 to 14 mm., width 3 1/2 mm.

LOCALITIES. Transvaal. — Pretoria district, XI.1926 (1 male, holotype in Transvaal Museum); Grootdraai, Olifants River, X.1927, leg. H. LANG (1 female, allotype in Transvaal Museum); Zoutpan, Zoutpansberg distr., 15.-30. XI.1932, leg. G. VAN SON (1 male, paratype, T. M.).

See Plate III, fig. 5.

SYSTEMATIC POSITION. *H. transvaalensis* belongs to the *vestitus*-group and is closely related to *vestitus* BAUDI, 1875, agreeing with the latter in the general shape of body, as well as in the absence of the prosternal fovea in the male. *Vestitus* (Plate III, fig. 6) differs from *transvaalensis* as follows: the apical joint of maxillary palpi in the male is simply dilated, subtriangular, but not securiform, with the apical margin only little longer than the inner lateral margin. The distal end of the outer margin of the excavate underside of anterior tibiae in the male is almost inerme, without a distinct dentiform dilatation; the distal half of the underside of posterior tibiae shows in the male a flattened and shiny longitudinal area, which is covered with numerous very coarse, nearly foveate punctures; the underside of the intermediate tibiae in the male has a similar structure as in the male of the forma typica of *transvaalensis*, but the background of the broadened distal sulcus is shiny. The eyes are very prominent, but not conical as in the forma typica of *transvaalensis*; the outlines of the eyes are rotundate (as it is the case in *transvaalensis* subsp. *rotundophthalmus*); the transverse diameter of eyes is distinctly longer than the longitudinal diameter, the latter about as long as the genae. Antennae very elongate, but more accrescent towards the apex;

apical joint in the male very elongate, fusiform, distinctly longer than penultimate joint, approximately of the length of the 8th joint and a little more than twice as long as broad, in the female distinctly longer than the penultimate joint and twice as long as broad (whereas it is in the female of *transvaalensis* subglobular and as long as broad, distinctly shorter than the previous joint). Pronotum narrower, only a little broader than head, with the sides a little less rounded, covered with round punctures, which become almost confluent on lateral surface, but there with the intervals finely reticulate and not forming longitudinal ridges.

I refer to *vestitus* a species of the western part of South Africa; it agrees very well with BAUDI's description of the particulars of the male, as there are the non-securiform apical joint of maxillary palpi and the absence of the prosternal fovea. The specimens I have examined measure 12 to 16 1/2 mm. in the length, and 3 1/2 to 5 mm. in the width; they come from the following localities (all in South African Museum) : NE Cape Province : Vryburg, I-II.1930, leg. C. G. STONE (2 males); Kimberley, Vaal River (1 couple). — South-west Africa : Grootfontein, I.1919, leg. J. DRURY (1 male); Mafa, II-III. 1923, leg. Mus. Exped. (1 couple); Nuragas, I.1920, leg. R. W. TUCKER (1 male); Ovamboland, 1890-1891, leg. ERIKSSON (2 females). — Southern Angola : Namakunde, II.1923, leg. Mus. Exped. (1 female).

HAAG, 1870, supposes the *vestitus* to be a Cistelide of the genus *Cylindrothorax*, while in 1878 he considers it as a good species of *Himatismus*, placing it in the relationship of *dubius* HAAG; besides the similar shape of pronotum, there are in fact no connections between the two species, as *dubius* shows the short antennae of the *villosus*-group, and in the male a securiform apical joint of the maxillary palpi and a prosternal fovea as well.

The species of the *vestitus*-group are well characterized by the absence of the prosternal fovea in the male; in the other particulars they agree to a certain extent with the *maculisparsus*-group. Males without prosternal fovea, however, are peculiar also to single species of other groups; so far the following species without prosternal fovea in the male are known : *natalensis* BAUDI, 1875, an isolate species, easily to recognize by the shiny and impunctate disc of the head and pronotum; *incisus* GEBIEN, 1937, the leading species of a group, which is well-defined by the emargination of the genae in front of the eyes; and *eclavatus* LESNE, 1920, belonging to the *villosus*-group, and differing from all the other *Himatismus* in the subcylindrical proximal joints of the antennae.

Another unknown form of the *vestitus*-group seems to occur in Northern Zululand; it is well characterized by the very dense and bicolorous pilosity of the elytra (whitish on the odd intervals, and of a reddish yellow on the even ones), and the strongly conical eyes. I have only a single female before me (with the locality label « Northern Zululand, IX.1923 » ex National Collection of Insects, Pretoria).

***Himatismus* (*Curimosphena*) *transvaalensis* *rotundophthalmus*, nov. subsp.**

Constantly differing from the forma typica of *transvaalensis* in the ro-

tundate and not conical eyes, the more elongate antennae, and in the formation of the tibiae in the male. The transverse diameter of eyes is hardly longer than the longitudinal one, and the eyes are almost as long as the genae. The penultimate joint of antennae is slenderer, about two-thirds longer than broad. In the male the underside of the intermediate tibiae is narrowly sulcate throughout their length, while the underside of the posterior tibiae is simply convex, without the obsolete impunctate line, which characterizes the forma typica.

LOCALITIES. Northern Transvaal: Nylstroom, 16.-31.XII.1923, leg. G. P. F. VAN DAM (2 males, holotype and paratype in Transvaal Museum); Lydenburg distr., 1896, leg. P. A. KRANTZ (1 male, paratype in Transvaal Museum); without locality, I.1913, leg. R. GLADSTONE (1 female, allotype in Transvaal Museum).

See Plate IV, fig. 7.

Himatismus (Curimosphena) recticollis, nov. spec.

Reddish brown, the underside and appendages partly paler; dull and pilose. — Head above with transversely lunulate strigae, becoming longitudinal towards eyes, and with a small spot of scattered punctures, or impunctate, at middle of vertex. Central lobe of epistome triangular, distinctly separated from lateral portions of epistome. Eyes moderately prominent, round, about as long as genae, and longer than broad; the genal outlines meet the ocular ones in an obtuse angle. Apical joint of maxillary palpi in the male broadened, with the apical margin one-third longer than inner lateral margin (fig. b); in the female simply dilated, longer than broad. Antennae strong, extending beyond base of elytra; in the male the penultimate joint a little longer than broad; the apical joint subglobular, as long as broad and much shorter than the previous one. — Pronotum square, in the female a little broader, with subparallel sides, sharp lateral angles, with the base as broad as anterior margin. Sides without lateral edge, the dorsal surface of pronotum continuously rotundate with the lateral surface. Integument densely covered with round and coarse punctures, somewhat scattered on anterior half at middle, becoming confluent towards the base and the sides. Prosternum simple in both sexes, without a median fovea in the male. Prosternal apophysis bent downwards. — Elytra with well-developed shoulders. Integument with less dense punctation on the sutural intervals, very densely punctured towards the sides; the odd intervals tessellate. Underside of afterbody with very fine, rather dense punctation. Anal sternite in the male with longitudinal impression, in the female with indicated impression across base. Legs elongate; trochanters of anterior femora simple in both sexes; underside of anterior tibiae in the male excavate, but without dentiform dilatation at the end of the outer margin of cavity; basal joint of posterior tarsi longer than unguis.

DIMENSIONS. Length 9 1/2 to 11 1/2 mm., width 3 1/4 to 4 mm.

LOCALITIES. Natal: New Hannover, 14 Dec. 1923, leg. HARDENBERG (1 male, holotype in Transvaal Museum); Durban, 1891, leg. N. BARKER (1 fe-

male, allotype in Transvaal Museum, 1 male and 2 females, paratypes in South African Museum); Malvern, Oct. 1960, 16 Nov. 1963 (1 couple, paratypes in Museum and Art Gallery, Durban), leg. N. BARKER (1 male, paratype in South African Museum).

See Plate IV, fig. 8.

SYSTEMATIC POSITION. *H. recticollis* is an isolate species, intermediate between the *vestitus*- and *patruelis*-group; I place it provisionally to the *vestitus*-group on account of the absence of the prosternal fovea in the male. It differs from the two species of this group, that is *vestitus* and *transvaalensis*, in the smaller size; the reddish brown colour of body; the subcylindrical



Fig. B. — Head with maxillary palpi, of a male of *H. recticollis*, n. sp.

and quadrangular shape of pronotum, showing subparallel sides, and with the base as broad as anterior margin (whereas it has rounded sides and with the base constantly broader than the anterior margin in *vestitus* and *transvaalensis*); the absent lateral margination of pronotum; the less prominent and rotundate eyes; the stouter and shorter antennae; and the longitudinal impression of the anal sternite in the male.

Himatismus (Curimosphena) Vansoni, nov. spec.

The new species imitates to a great extent *H. patruelis*, BERTOLONI 1849, but differs from the latter as follows:

- a. Head a little narrower.
- b. Eyes strongly projecting beyond the cephalic outlines, with the contours rotundate and the longitudinal diameter distinctly longer than the

transverse one. In the forma typica of *patruelis* (Plate , fig. 10) the contours of the eyes are slightly conical, with the longitudinal diameter about as long as the transverse one.

c. Genae slightly rounded and distinctly narrowed towards the anterior margin of eyes; in the forma typica of *patruelis* they are subparallel and hardly narrowed in front of the eyes.

d. Apical joint of the maxillary palpi slenderer; in the male with the apical margin about as long as the inner lateral margin, in the female with the apical margin only two-thirds the length of the inner lateral margin. In *patruelis* the apical joint of maxillary palpi is constantly broader, with the apical margin in the male about twice as long as the inner lateral margin, and in the female as long as the latter, or even longer.

e. Antennae distinctly slenderer and a little more elongate, but showing exactly the same proportions of the single joints as in *patruelis*.

f. Pronotum slenderer, generally as long as broad in the female, or somewhat longer in the male, with the sides showing a slight tendency to become rounded and sinuate between middle and posterior angles. In the forma typica of *patruelis* the pronotum is stouter, about as long as broad in the male, and a little broader in the female; the sides are almost subparallel (Pl. V, fig. 10).

g. Punctuation of elytra rougher and coarser; the eighth interval much narrower than the intervals seven or nine, and, as in the sixth interval, with its fine punctuation more or less intermixed with some coarse punctures; the punctuation of the apical surface strong and distinct. In the forma typica of *patruelis* the eighth interval of elytra is almost as broad as the bordering intervals, without or only with a few rough punctures among the fine punctuation of the background; the punctuation of the apical surface becomes very fine and is less distinct.

h. Legs slenderer and less pubescent. In the male the posterior and intermediate tibiae almost straight, with the underside narrowly sulcate along midline and hardly edged laterally, and with the apical half of the sides of the underside of intermediate tibiae furnished with a denser, but little obvious reddish-yellow pilosity, which is hardly pronounced at the posterior tibiae; the smoothed and concave underside of anterior tibiae narrower, with the distal tubercle of the outer edge more developed and somewhat dentiform, and with the yellowish pilosity of the inner edge very sparse and little obvious. In the female the intermediate and posterior tibiae are straight, with their underside sulcate only at the proximal half, and furnished with a denser reddish yellow pilosity along the inner edge, the same as in the anterior tibiae. The tarsi are slenderer too. — In the typical *patruelis* the formation of the intermediate and posterior tibiae is very different. In the male the inner margin of intermediate tibiae is a little dilated behind the base and slightly sinuate between middle and apex, whereas the posterior tibiae are distinctly curved and bent inwards; the underside of posterior tibiae is broadened, with the two distal thirds flattened and smoothed, showing there a plane surface, which becomes slightly inclined upwards to-

wards the apex, with a straight and little obvious median line of minute yellowish setae, whereas the carinate lateral edges, as well as the apical margin are furnished with a dense fringe of longer whitish yellow bristles; the intermediate tibiae are of a similar structure, the flattened surface of the underside, however, is narrower and the median line of setae is removed from the middle towards the outer edge; the smoothed and slightly concave underside of anterior tibiae is much broader, with the obvious fringe of whitish yellow bristles of the inner margin much denser, and the distal tubercle of the outer edge less pronounced and not distinctly dentiform. In the female the intermediate and posterior tibiae are distinctly bent inwards, with the underside shaped as in the females of *Vansoni*, but with the inner margin of all the tibiae furnished with an obvious fringe of dense whitish yellow bristles.

i. The body appears as if darker than in *patruelis*, and its pilosity finer, sparser and less yellowish.

DIMENSIONS. Length 12 1/2 to 17 mm., width 4 1/2 to 6 1/4 mm.

LOCALITIES. Transvaal. — Pretoria-Nord, 4 Oct. 1948, leg. G. VAN SON (5 males, 5 females, holo- and allotype, paratypes in Transvaal Museum); Pienarrs River, 1898, leg. v. JUTZENCKA (3 males, 1 female, T.M.); Lichtenburg, leg. H. BRAUNS (1 couple, T.M.); Waterberg distr., 1898-1899, leg. v. JUTZENCKA (1 male, T.M.); Naawpoort, Pietersburg distr., 27 Nov. 1927, leg. G. VAN SON (1 male, 2 females, T.M.); Messina, Dec. 1918, leg. R. W. TUCKER (1 couple, S.A.M.); Zoutpan, Zoutpansberg distr., 15-30 Nov. 1932, leg. G. VAN SON (1 male, 2 females, T.M.); Letaba, 27 Nov. 1947, leg. STEYN (1 female, T.M.). — NE Cape Province. — Vryburg, 1917, leg. J. BROWN (1 female, S.A.M.), Oct. 1939, leg. Mus. staff (1 male, 2 females, S.A.M.). — Oranje Free State. — Bothaville, 18 Jan. 1899, leg. H. BRAUNS (2 males, 3 females, T.M.). — Bechuanaland Prot., Kalahari, Kooa-Sukuma, leg. L. SCHULTZE (1 male, S. A. M.). — South-west Africa. — Windhuk, Nov. 1920, leg. S. GILLMAN (1 male, S.A.M.), 1919, leg. PURCH (1 female, S.A.M.); Gaub, Jan. 1920, leg. R. W. TUCKER (2 males, S.A.M.), Jan. 1919, leg. J. DRURY (1 male, S.A.M.); Otjivarongo, Jan. 1921, leg. J. S. BROWN (1 male, S.A.M.); Abachaus, Jan. 1950, leg. G. HOBOM (3 females, T.M.); Grootfontein, Jan. 1919, leg. J. DRURY (1 female, S.A.M.); Otjikondo, Jan. 1925, leg. Mus. Exped. (2 males, 1 female, S.A.M.); Sandfontein, Jan. 1921, leg. S. GILLMAN (3 males, S.A.M.), leg. Miss WILMAN, 1922 (2 males, S.A.M.), Jan. 1920, leg. J. DRURY (1 female, S.A.M.); Kuring Kuru, Okovango, Feb. 1923, leg. R. DICKMAN (1 female, S.A.M.); Nuragas, Jan. 1919, leg. R. LIGHTFOOT (1 male, S.A.M.); Tsumeb, Jan. 1920, leg. E. KOCHIG (5 males, 2 females, S.A.M.), Jan. 1923, leg. Mus. Exped. (1 female, S.A.M.), Dec. 1919, leg. R. W. TUCKER (1 female, S.A.M.); Gobabis (7 males, 4 females, Zoolog. Staats-Sammlg., Muenchen), 1933, leg. Dr MAAG (1 female in my own coll.). — Southern Rhodesia. — Birchenough Bridge, Jan. 1938, leg. G. VAN SON (1 female, T.M.).

See Plate V, fig. 9.

I name the new species in honour of Dr G. VAN SON, Entomologist to the

Transvaal Museum; he collected this species together with *patruelis* and *buprestoides* at the light of the verandah of his house.

SYSTEMATIC POSITION. The new species hitherto has been mixed up with *H. patruelis*, owing to its most striking resemblance to the latter; with the exception of the particulars mentioned in the differential diagnosis, both species are almost identical in the peculiar striolate sculpture of the pronotum and in the entire structure of body. Their separation has been made more difficult as both their typical forms occur partly in the same geographical areas, and seem to live sometimes together. The range of their vicariant subspecies, however, is separated.

The variability of the new species seems to be rather small, with exception of the material coming from South-west Africa. This material is composed of typical *Vansoni* and several specimens, which are slightly different from the latter in the broader head, a little more prominent eyes, broader shape of pronotum and elytra, and in the little longer pilosity of elytra; but they agree in the essential characters, as there are the formation of the tibiae and maxillary palpi in the male, perfectly with typical *Vansoni*. At the moment it is for me impossible to decide whether these specimens are variations of *Vansoni*, or may even represent another independent species.

H. patruelis has so far been interpreted incorrectly. It has been described in 1849 by J. BERTOLONI in a very rare book (1). The very short description indicates Inhambane in Port. East Africa as type locality, but at the same time the words « antennarum apice fulvo » and « reperitur quoque in Capite Bonae Spei » greatly help to interpret this species correctly. There exists only one species of *Himatismus* with a reddish distal portion of the antennae, and ranging from Port. East Africa to the Cape Province, that is *H. variegatus* HAAG, 1870. HAAG gives a perfectly clear description of this species, mentioning the characteristic acuductate striolation of the pronotum, the absence of the spines of the trochanters of anterior femora in the male, and the non-securiform apical joint of maxillary palpi in the male. Also CHATANAY, 1914, describing his *heterophthalmus* as a second species with striolate pronotum, uses for the *patruelis* the wrong name of *variegatus*, which in fact (as BLAIR, 1914, pointed out) has to be referred to a quite different species of FABRICIUS, erroneously twice redescribed by HAAG, 1877, as *ocularis*, and by GEBIEN, 1920, as *coniger*. The discovery of *H. Vansoni* as a third *Himatismus* with striolate pronotum complicates the interpretation, but I have chosen for

(1) For the kind assistance in procuring to me the original description of *H. patruelis* BERTOLONI and the study of the typical specimens, I am very indebted to Prof. Augusto TOSCHI, Director of the Laboratorio di Zoologia Applicata alla Caccia of the University of Bologna, to Dr. Antonio FIGUEIREDO GOMES E SOUSA of Lourenço Marques, and to Dr. M. M. PRINCIPI of the Institute of Entomology of the University of Bologna.

Prof. TOSCHI was kind enough to examine the typical material of BERTOLONI's collection. According to his statement in litt. there are under the name of *patruelis* two specimens in this collection: the first with the original label is a female and seems to belong to *buprestoides* GERSTAECKER, whereas the second specimen is doubtless a male of *patruelis* sens. m. (*variegatus* HAAG nec F., *disseptus* PÉRING. in litt., mentioned by BLAIR 1914). I propose to consider the male as the holotype of *patruelis* as the distribution of *patruelis* sens. m. agrees perfectly with BERTOLONI's geographical indication; *buprestoides* does not go further West than Pretoria, in no case occurring in the Cape Province.

patruelis the one species with the specialized formation of the posterior tibiae of the male, which I was able to prove to occur in Port. East Africa as well as in the Cape Province; *H. Vansoni* has so far not been found in Port. East Africa.

Unfortunately many other authors have referred the name of *patruelis* (unknown to HAAG) to a quite different species, that is *buprestoides* GERSTAECKER, 1854. Even GEBIEN, 1937, has partly accepted this error, in indicating *tessulatus* GERST. and *occidentalis* LACORDAIRE, as synonyms of *patruelis*. This is quite wrong, as *tessulatus* as well as *occidentalis* represent good species of the *buprestoides*-group, which is well-characterized by the punctate and not striolate pronotum, and in the male by the spines of the trochanters of anterior femora and the strongly securiform apical joint of maxillary palpi. However in a later paper, 1937 *a*, GEBIEN attributes to *patruelis* BERTOLONI, a reflected prosternal apophysis, a particular, which, in fact, is shown by the right *patruelis* (*variegatus* HAAG, CHATANAY, nec FABRICIUS); in *H. buprestoides* GERSTAECKER (classified erroneously in many collections as *patruelis*), the prosternal apophysis is horizontally projecting backwards beyond the coxal cavities, by which particular *buprestoides* is readily to recognize among all the other *Himatismus* with prolonged basal joint of posterior tarsi, except for the subsp. *septentrionalis* LESNE, of *trivialis* GERSTAECKER.

The group of *patruelis* is to be placed in the relationship of the *maculisparus*-group, from which its species are easily to distinguish in the striolate sculpture of the pronotum.

***Himatismus* (*Curimosphena*) *Vansoni* *karrooensis*, nov. subsp.**

Karrooensis differs from the forma typica of *Vansoni* as follows:

The sides of pronotum are distinctly rounded and comparatively strongly narrowed in front of the anterior angles; the anterior margin therefore is distinctly narrower than the base. The sculpture of the head and the pronotum show the tendency to become scattered and interrupted along midline. The elytra are less coarsely and less densely punctured, with the punctures becoming almost evanescent on apical surface. The extremities are stouter. The body is paler, of a reddish brown, and its pilosity is denser and paler.

LOCALITIES. SE Cape Province: Willowmore, 25 Feb. 1916, leg. H. BRAUNS (6 males, 3 females, holo- and allotype, paratypes in Transvaal Museum); Strydenburg, 26 Nov. 1917 (1 female, Nat. Collection of Insects, Pretoria); Bain's Kloof, Jan. 1931, leg. K. H. L. KEY (1 female, S.A.M.), Griqualand: Windsorton, 20 Dec. 1920, leg. H. BRAUNS (1 female, T.M.); Hopetown, leg. FRITSCH (1 couple, Zool. Staats-Sammlg., Muenchen); Kimberley, 18 July 1912, leg. BRO. POWER (1 female, S.A.M.). — W. Transvaal: Delareyville, leg. H. BRAUNS (2 females, T.M.).

***Himatismus* (*Curimosphena*) *Gomesi*, nov. spec.**

The new species belongs to the *patruelis*-group; it has to be placed quite

near to *Vansoni* because of the simple posterior tibiae in the male. It differs, however, from *Vansoni* in the following particulars :

Size much smaller; length 10 1/4 to 13 mm., width 3 1/2 to 4 1/2 mm.

Apical joint of maxillary palpi broader, with the apical margin distinctly longer than inner lateral margin in the male, shorter than that in the female. Pronotum square, smaller than in *Vansoni* and shorter, distinctly broader than long, with subparallel sides; the striolate sculpture much finer, less-pronounced and denser, with the striolae resolved into an elongate and shallow punctation towards the sides.

Sculpture of the elytra much finer, with the punctures of the primary rows very fine and becoming almost evanescent towards the apex; the intervals between the tessellate patches of the odd lateral intervals only sparsely punctured.

Pilosity of the whole body much denser, with the tessellate patches on elytra larger.

Antennae and legs slenderer. The basal joint of posterior tarsi only a little longer than the unguis joint (comparatively much longer than that in *Vansoni*). Underside of the posterior and intermediate tibiae in the male simple, obsolete sulcate along midline only proximally; with a patch of yellow hairs apically. The distal dilatation of the outer margin of the cavity of the underside of anterior tibiae in the male very slight.

Lateral margination of pronotum very fine, but complete (interrupted at middle in *Vansoni*).

Eyes a little more prominent, with the transverse diameter a little longer than the longitudinal one.

LOCALITIES. Southern Africa. — Delagoa Bay, leg. J. DE COSTER (1 male, holotype in South African Museum); Northern Zululand, Sept. 1923 (a couple, female allotype in National Collection of Insects, Pretoria, male paratype in Transvaal Museum). I dedicate the new species to Dr ANTONIO FIGUEIREDO GOMES E SOUSA from the Botanical Institute of the University of Coimbra, actually in Lourenço Marques.

***Himatismus (Curimosphena) patruelis capensis*, nov. subsp.**

The new subspecies differs from the forma typica in the following particulars: The punctation of elytra is much finer; the punctures of the lateral intervals between the tessellate patches are finer, well separated, thereby leaving the background shiny, whereas it is dull in the typical *patruelis*, owing to the rugose punctation; the punctures of the apical surface are finer and become evanescent towards the apex. The flattened surface of the underside of intermediate and posterior tibiae in the male is narrower, however, very well-pronounced. The eyes are a little less prominent. The colour of the body is reddish brown, and the pilosity seems to be a little denser and paler.

LOCALITIES. SE Cape Province: Resolution, Albany distr., Jan., Feb., Apr., June and Dec. 1928, leg. A. WALTON (2 males, 15 females, holo- and allotype, paratypes in Transvaal Museum); Algoa Bay, 4 Jan. 1917 (1 male, 2

females, leg. H. BRAUNS, T.M.); Wolmer, 31 Jan. 1942, leg. M. HOEKSTRA (1 couple, Rhodes Univ. College).

Capensis is the southern subspecies of *patruelis*, resembling much the southern subspecies *karrooensis* of *Vansoni*. The distribution of the forma *typica* of *patruelis* BERTOLONI, is demonstrated in the following list of examined localities:

Transvaal: Pretoria-Nord, 4 Oct. 1948, leg. G. VAN SON (5 males, 11 females, T.M.); same locality, 25 Dec. 1949 and 17 Jan. 1950, leg. CHR. VAN SON (3 males, 9 females, T.M.); Pretoria, 8 Dec. 1914 (1 female, Nat. Collection of Insects, Pretoria); Kalkheuvcl, Pretoria distr., Oct. 1908, leg. C. SWIERSTRA (1 male, T.M.); Pienaars River, 1898, leg. v. JUTRZENCKA (1 female, T.M.); Waterkloof, Pretoria distr., Nov. 1903, leg. F. NOOME (1 female, T.M.); Bandeliers Koop, 9 Oct. 1906, leg. F. NOOME (1 male, T.M.); Rustenburg, 16 Oct. 1939, leg. E. BEDFORD (2 females, Agric. Res. Inst., Pretoria); same locality, Dec. 1949, leg. A. L. CAPENER (2 males, T.M.); Waterval, 7 Oct. 1899, leg. A. J. T. JANSE (1 couple, T.M.); Marico, 28 Dec. 1929 (1 female, Agric. Res. Institute, Pretoria); Lydenburg distr., 1896, leg. P. A. KRANTZ (2 males, 7 females, T.M.); Settlers, 5 Nov. 1928, leg. J. J. GREEN (4 males, 8 females, Nat. Collection of Insects, Pretoria); Leydsdorp, 16 Oct. 1907, leg. J. MAUGHTON (1 male, T.M.); Barberton, 3 Dec. 1909, leg. Miss DE BEER (1 female, T.M.); Wonderfontein, 21 Jan. 1939 (1 female, Agric. Res. Inst., Pretoria); Waterberg distr., 1898-1899, leg. v. JUTRZENCKA (1 female, T.M.); Grootdraai, Oct. 1927, leg. H. LANG (6 males, 6 females, T.M.); Thabina, Zoutpansberg distr., 15 Nov. 1906, leg. C. SWIERSTRA (1 couple, T.M.); Zoutpan, Zoutpansberg distr., 15 to 30 Nov. 1932, leg. G. VAN SON (3 males, 1 female, T.M.); Moordrift, 1925, leg. G. P. F. VAN DAM (2 males, 1 female, T.M.); Sikororo, July 1922, leg. G. P. F. VAN DAM (1 couple, T.M.); Naawpoort, Pietersburg distr., 27 Nov. 1927, leg. G. VAN SON (1 female, T.M.); Nelspruit, Nov. 1921 (1 female, Nat. Collection of Insects, Pretoria); Nylstroom, 16 to 31 Dec. 1921, leg. G. P. F. VAN DAM (1 male, T.M.); Sabi River, 25 Sept. 1905, leg. Dr GUNNING (1 female T.M.); Leteba, 27 Nov. 1947, leg. STEYN (1 female, T.M.). — Bechuanaland: between Francetown and Lake Makarikari, Mopani Forest (1 female, T.M.). — Southern Rhodesia: Penhalonga, Nov. 1923, leg. SWINBURNE & STEVENSON (1 male, T.M.); Bembezi, Jan. 1948, leg. P. ROWLAND (1 female, Rhodes Univ. College); Gwelo, Jan. 1948, leg. P. ROOSE (1 female, Rhodes Univ. College); Bulawayo, 27 Oct. 1929, leg. R. H. R. STEVENSON (1 female, T. M.). — Port. East Africa: Beira, Dec. 1906, leg. P. A. SHEPPARD (1 female, T.M.).

Himatismus (Curimosphena) heterophthalmus transbechuanus, nov. subsp.

The new form is closely allied to the South-west African *heterophthalmus* CHATANAY, 1914, agreeing with it in the pointed conical eyes, the absence of spines of the trochanters of anterior femora in the male, and in the striolate sculpture of pronotum. It differs from the typical *heterophthalmus* as follows: The pronotum is slenderer, with almost subparallel sides, and with the base hardly broader than the anterior margin (in the typical *heterophthalmus* the pronotum is broader, with the sides slightly rounded and dis-

tinctly narrowed towards the anterior margin; the latter is distinctly narrower than the base). The antennae are stouter; the penultimate joint is in the male one and a half times as long as broad, and the ninth joint is just twice as long as broad (in the male of the typical *heterophthalmus* the penultimate joint is twice as long as broad, and the ninth joint is two and a half times as long as broad). The apical joint of the maxillary palpi is less broadened; its inner lateral margin is in the female one and a half times as long as the apical margin (at most one-quarter longer than that; in the female of the typical *heterophthalmus*). The dentiform dilatation of the distal end of the outer edge of the excavate underside of anterior tibiae in the male is well-developed (only slightly indicated in the male of the forma typica of *heterophthalmus*).

LOCALITIES. NE Transvaal: Grootdraai, Oct. 1927, leg. H. LANG (1 male, 2 females, holotype and allotype, paratype in Transvaal Museum); Zoutpan, Zoutpansberg district, 15 Nov. 1930, leg. G. VAN SON (1 male, T.M.). — Southern Rhodesia: Sebungwe, Oct. 1913 (1 female, ex coll. Division of Entomology of the Department of Agriculture, Salisbury).

It may be mentioned that the female of *heterophthalmus* has the same conical shape of the eyes as in the male; the supposed allotypical female CHATANAY has described 1914 from Windhoek has to be referred to another species, probably to *Vansoni* or *vestitus*. So far I could state the formation of the eyes is not subject to any dimorphous change in the *Epitragini*.

H. heterophthalmus (Plate VI, fig. 11), is another species of the *patruelis*-group; peculiar to it is the sharply conical shape of the eyes. With regard to the formation of the legs, it agrees with *Vansoni* and not with *patruelis*. I know the typical *heterophthalmus* from the following South-west African localities: Grootfontein, Jan. 1919, leg. J. DRURY (1 male, S.A.M.); Nuragas, Jan. 1920, leg. R. W. TUCKER (1 male, S.A.M.); Gobabis (1 couple, Zoolog. Staats-Sammlg., Muenchen).

Himatismus (Curimosphena) congolanus, nov. spec.

Male unknown; female: body broad, dull; pilosity of a uniform yellow; blackish brown, the maxillary palpi and antennae reddish brown. — Head strongly transverse, above densely covered with confluent transverse strigae, becoming resolved into somewhat scattered punctures at middle of vertical base. Central lobe of epistome triangular, hardly separated from lateral portions of epistome. Eyes strongly projecting beyond cephalic outlines, of slightly subconical shape, with the longitudinal diameter distinctly shorter than the transverse one, considerably shorter than genae. The latter slightly rounded and shortly narrowed in front of anterior margin of eyes. Tempora comparatively long, strongly narrowed towards neck, without forming any angle, with the outlines continuous with those of eyes. Apical joint of maxillary palpi long, with the inner lateral margin much longer than the apical margin. Antennae rather stout, but extending beyond pronotal base, covered with whitish yellow setae on the three to four proximal joints, with dark ones on the remaining distal joints; all joints elongate, except for the

two apical ones; the penultimate joint triangular, as long as broad; the apical joint roundish, longer than broad, approximately the length of the previous joint, but narrower. — *Pronotum* strongly transverse, much broader than head, almost two-thirds broader than long, broadest near to the anterior margin, of transversely cordiform shape, with the sides strongly rounded and narrowed towards the slightly emarginate anterior margin, strongly and nearly straightly narrowed towards base, obsoletely sinuate in front of posterior angles. The latter sharp and rectangular, the anterior angles rounded. Base bisinuate, much broader than anterior margin. Lateral edge sharp, complete and subcarinate. Surface moderately convex, without impressions, its integument altogether covered with an extremely dense, coarse, but shallow punctation, with the narrow intervals between punctures forming some sort of elevate reticulation. Base marginate laterally, the lobiform middle immarginate and impunctate. Prosternal apophysis comparatively broad, gradually and slightly sloping towards prothoracic foramen, with the apex squarely cut off and perpendicularly declivous. — *Elytra* very broad, much broader than pronotum, with broad and obtusely rounded shoulders, rather convex, and, viewed from the side, with a rather steep, obliquely sloping apical declivity. Primary rows with very fine punctures. The odd intervals bear patches of adherent yellow hairs, whereas the even intervals are covered with a scattered, uniform yellow pilosity; the three lateral tessellate intervals between the hairy patches with very dense, rugose, sometimes transversely confluent punctation. Underside of afterbody shiny, with rather fine punctures laterally, becoming very fine and scattered on disc. — Legs simple; the basal joint of posterior tarsi elongate, almost as long as the two apical joints taken together.

DIMENSIONS. Length 14 mm., width 6 1/4 mm.

LOCALITY. Belgian Congo: Kafakumba, Jan. 1934, leg. G. F. OVERLAET (1 female, holotype in Musée du Congo Belge).

See Plate VI, fig. 12.

SYSTEMATIC POSITION. There is only one species, to which the new species could be brought in some relationship, and that is *buprestoides* GERSTAECKER, 1854. Although the pronotum is quite differently shaped, it is also very transverse in *congolanus*, and the sculpture of elytra, as well as the shape of head are rather similar to those particulars in *buprestoides*. But *buprestoides* is readily to distinguish from the new *congolanus* by the horizontally projecting and apically sharply pointed prosternal apophysis (squarely cut off and gradually sloping downwards in *congolanus*); the broader apical joint of the maxillary palpi, the stouter antennae and shorter tarsi.

It is impossible to fix the systematic position of the new species, as, unfortunately, the male is unknown; I place it provisionally as isolate species in the relationship of *buprestoides* (1).

(1) In a later paper (C. KOCH, Die Tenebrioniden des Südl. Afrikas. — IV. Ueber vier neue *Himatismus*-Arten, in print) I have pointed out that *H. congolanus* is related to *H. Basilevskyi*; the latter is the leading species of a proper group of *Himatismus*.

Himatismus (Curimosphena) buprestoides cylindricollis, nov. subsp.

Differing from the variable forma typica of *buprestoides* in the peculiar shape of pronotum. The latter is hardly broader than long, and shows slightly but perfectly regularly rounded sides, equally narrowed from the middle towards the base, as well as to the anterior margin, including therefore the broadest point at about middle. In the typical *buprestoides* (Plate VII, fig. 13), in spite of its great individual and geographical variability, the pronotum is always much broader than long and broadest before middle.

LOCALITY. Belgian Congo: Elisabethville, 1935, leg. Dr RICHARD (1 couple, holo- and allotype in Musée du Congo Belge).

See Plate VIII, fig. 16.

Himatismus (Curimosphena) buprestoides strangulatus, nov. subsp.

It is another rather striking subspecies of *buprestoides*, with the pronotum also elongate, hardly broader than long, broadest at middle, as in the subsp. *cylindricollis*, but the sides are strongly narrowed and attenuate from middle towards the apical margin, with the base much broader than the anterior margin, whereas both have almost the same width in the subsp. *cylindricollis*.

The somewhat ampullaceous shape of the pronotum is very characteristic.

LOCALITY. Kaokoveld: Hoarusib Otshu, Mar. 1926, leg. Mus. Exped. (3 females, holotype and paratypes in South African Museum).

See Plate IX, fig. 17.

It is very difficult to judge the taxonomic value of this form, as the male is unknown, but there is a supposition that it may represent a good species. The fact that another female from Benguela (leg. MOUFLET, ex Zoolog. Staats-Sammlg., Muenchen) agrees perfectly with *strangulatus* seems to support my opinion, as the material coming from the territory between Benguela and the Kaokoveld, shows again all particulars of the typical *buprestoides*. For instance a female from the Kunene River, Mar. 1923, leg. Mus. Exped. (S.A.M.) can be referred only to the typical *buprestoides*, differing from the *strangulatus* from the Kaokoveld and Benguela in the strongly transverse pronotum, the distinctly more transverse head, the more convex eyes, the stouter and shorter antennae, and the bicolorous pilosity of elytra. *H. buprestoides* has a wide range, occurring in Port. East Africa, Natal, Zululand, Swaziland, the Eastern Transvaal (there going as far as Pretoria), Rhodesia, Bechuanaland, Angola, the Tanganyika Territory, the Belgian Congo, and Madagascar. *H. plebejus* FAHRAEUS, 1870, (Plate VII, fig. 14), is according to the holotype (ex Naturhistoriska Riksmuseum, Stockholm) a subspecies of *buprestoides*, differing from locotypical specimens from the western part of Port. East Africa (Tette) in the less transverse pronotum, the less prominent and smaller eyes, a little slenderer and generally smaller body and in the reddish and not black pilosity of the antennae; it seems to occur in the southern part of Port. East Africa, Rhodesia, Zululand and Natal; the specimens of Natal are the smallest, generally showing a denser pilosity. Another

subspecies, resembling *plebejus* by the less prominent eyes and the slenderer body, occurs in the Belgian Congo (Plate VIII, fig. 15). *H. trochantericus* FAIRMAIRE, 1897, is treated by GEBIEN, 1937, as a spec. prop., although it was declared a synonym of *buprestoides* by FAIRMAIRE himself in 1903; it does not differ from *buprestoides plebejus*. I hope to be able and to give later a revision of the numerous subspecific forms of *buprestoides*.

The species of the *buprestoides*-group are allied to those of the *maculisparsus*-group, from which they differ by the spines of the trochanters of anterior femora in the male; there are known the 4 species *buprestoides* GERSTAECKER, *trivialis* GERSTAECKER, with the northern subspecies *septentrionalis* LESNE, *tessulatus* GERSTAECKER, with the northern subspecies *Lindneri* KOLBE, and *occidentalis* LACORDAIRE. I do not know *H. seriatus* GEBIEN, 1937 a, placed by the author in the relationship of *trivialis*. All these species of the *buprestoides*-group show a strongly securiform apical joint of the maxillary palpi in the male.

***Himatismus (Curimosphena) natalensis Pinheyi*, nov. subsp.**

This extremely northern subspecies of *natalensis* differs from the typical form as follows:

Eyes more prominent, slightly subconical, with the longitudinal diameter hardly longer than the transverse one (in the forma typica of *natalensis* the longitudinal diameter of eyes is much longer than the transverse one). The supra-antennal lines, in the typical form shiny and sharply defined, are badly demarcated. The pronotum is a little shorter and more rounded at the anterior angles. The pilosity of elytra is composed of a continuous layer of hairs of a brownish yellow on the even intervals, with tessellate patches of a whitish yellow on the odd intervals; between the pilose layers of the single intervals there are fine and bare longitudinal lines, leaving the background exposed and thereby well-separating the pilosity of the single intervals (in the typical *natalensis* the pilosity of the even intervals is of a clayed-coloured yellow, that of the tessellate patches of the odd intervals of a pure white; the tessellate patches are in contact with the yellow stripes of the even intervals, without any separating, bare lines in between).

LOCALITY. Kenya Territory: Kitui, Oct. 1937, leg. R. TOKER (2 males, 1 female, holo- and allotype in Transvaal Museum, paratype in Coryndon Museum, Nairobi). I have named the new subspecies after Mr E. C. G. PINHEY, Entomologist to the Coryndon Museum.

Hitherto *H. natalensis* was believed to be an exclusively South African species. It represents among the other *Himatismus* a quite isolate species, very specialized by the gradually but perfectly flattened, broad and shiny prosternal apophysis; the absence of the prosternal fovea in the male; the shiny and impunctate disc of head and pronotum; the short antennae, extending only very little beyond pronotal base; the abbreviate basal joint of posterior tarsi, which is practically only as long as the unguis joint; the fine and oblique supra-antennal lines on the head; and the strongly securiform apical joint of maxillary palpi in the male.

H. natalensis BAUDI, 1875, has been described from the Delagoa Bay; I know specimens of the forma typica from the following localities, all situated in Southern Rhodesia: Birchenough Bridge, Jan. 1938, leg. G. VAN SON (2 females, T.M.); Impudse River, Melsetter distr., 17 Nov. 1928, leg. R. H. R. STEVENSON (1 male, Nat. Museum of Southern Rhodesia).

Himatismus (Curimosphena) semialatus, nov. spec.

Body oblong, dull, convex; black, with the legs, trophi, the proximal and distal portion of antennae red, the elytra sometimes brown; sparsely pilose. — Head above a little broader than long, considerably narrower than pronotum, plane, covered with very dense, coarse, confluent elongate punctures, with the intervals between punctures very narrow and forming fine oblique ridges, which are directed towards the middle of vertex; pilosity yellowish. Central lobe of epistome triangular, distinctly separated from lateral portions of epistome. Eyes flat, with the contours slightly rounded and very little projecting beyond genal outlines, but continuous with temporal outlines and dilated towards the posterior margin; distinctly longer than broad. Genae subparallel, much shorter than eyes, broadly rounded with the epistome. Tempora shorter than eyes, strongly convex, rounded and narrowed towards neck. Apical joint of maxillary palpi simple, longer than broad, in the male larger, but only little broader than in the female. Underside of head with coarse, shortly setiferous punctation. Antennae stout and rather short, reaching the base of pronotum, accrescent and becoming compressed towards apex; the third joint the longest, about twice as long as broad, one and a half times as long as second joint; the two preapical joint about as long as broad; the apical one subglobular, a little longer than broad and about the length of the penultimate joint. — Pronotum convex, cordiform, broadest before middle, there a little broader than long, a little narrower than elytra, with the sides strongly rounded and narrowed towards anterior margin, a little more narrowed towards the base, and slightly sinuate in front of the posterior angles. Anterior margin straight, sharply carinate on the sloping lateral portions, with acute and prominent lateral angles. Lateral edge sharply carinate and complete. Base slightly bisinuate, with the marginal carina broadened and smoothed towards middle. Integument densely covered with round or shortly lunulate, almost confluent punctures at midline, becoming obliquely to longitudinally confluent towards sides, there with the intervals between punctures raised to fine longitudinal ridges. Underside of prothorax very coarsely and densely punctured. Middle of prosternum in the male with a very small, round, annularly carinate and encircled fovea, from which emerges a short brush of stiff yellow bristles; the surrounding surface of this fovea is smooth and very shiny. Prosternal apophysis bent downwards. — Elytra convex, with the sides slightly rounded and a little more narrowed towards base in the male than in the female; shoulders badly developed, short and obtusely rounded, a little better pronounced in the male; the humeral surface more or less impressed; humeral callus absent. Base broadly emarginate at middle. Wings reduced; they

are abbreviate and do not reach the apex of elytra, being one-third shorter than the latter. Integument impunctate and shiny along suture, densely covered with rather strong punctures on disc, with the punctation becoming gradually coarser and more concentrated towards sides. The tessellate yellowish pilosity sparse, forming a few densely pilose, very well-defined, small spots on the third and the penultimate interval. Basal portion of mesosternum covered with round and very coarse punctures. Metasternum abbreviate, only as long as basal sternite, densely covered with round and rather strong punctures. Abdomen densely and finely punctured. Anal sternite in both sexes without impression. Legs short; femora strongly clavate, with the trochanters of anterior femora simple in both sexes; tibiae straight, the anterior tibiae slightly compressed and their underside very narrowly sulcate in the male. Tomentose soles of tarsi comparatively small; the basal joint of posterior tarsi a little shorter than ungual joint.

DIMENSIONS. Length 7 1/2 to 10 mm., width 2 1/2 to 3 mm.

LOCALITIES. Belgian Congo: Tanganyika-Moero, Nyunzu, Jan., Feb. 1934, leg. DE SAEGER (8 spec., holo- and allotype in Musée du Congo Belge, paratypes ibidem and in Transvaal Museum); Bassin Lukuga, Apr.-July. 1934, leg. DE SAEGER (1 spec., BCM.); Kabalo, Mar. 1926, leg. H. SCHOUTEDEN (1 spec., BCM).

See Plate IX, fig. 18.

SYSTEMATIC POSITION. The new species belongs to the *villosus*-group, and represents the only species of *Himatismus* with reduced wings, a short metasternum, basally rounded and narrowed sides of the elytra, and almost rounded shoulders. From the *Derosphaerius* with reduced wings it is easily to distinguish by the tomentose soles of the tarsi, but the legs are red as in this genus, whereas they are dark in all the other *Himatismus*.

***Himatismus* (*Curimosphena*) *Schoutedeni*, nov. spec.**

Body oblong, dull, convex; blackish brown, with the appendages partly paler; pilose. — Head above much narrower than elytra, plane; covered with coarse, dense, somewhat rugose punctures, becoming obliquely elongate towards sides, with the intervals between punctures forming fine oblique or longitudinal ridges. Central lobe of epistome shortly triangular, very slightly separated from lateral portions of epistome. Eyes flat, hardly projecting beyond genal outlines, with their contours continuous with those of the tempora, much longer than broad and much longer than adocular portion of genae. Tempora convex, strongly rounded and strongly narrowed towards neck. Apical joint of maxillary palpi simply dilated towards apical margin, in the male of larger size than in the female and with the surface of underside very densely covered with an extremely fine, somewhat asperous micropunctation. Antennae moderately long, hardly reaching the pronotal base, accrescent and becoming compressed towards apex; the third joint the longest, about twice as long as broad and one and a half times as long as the second; fourth joint only very little shorter than third; the following joints becoming gradually shorter and broader towards the apex;

the ninth joint only as long as broad; the tenth joint distinctly broader than long; the apical one glandiform, much narrower but not shorter than the penultimate joint, a little longer than broad. — Pronotum very broad, convex, broadest before middle, there one and a third times as broad as long, narrower than elytra, with the sides strongly rounded and narrowed towards anterior margin, less rounded but strongly narrowed towards base, and slightly sinuate in front of the latter. Anterior margin straight, shortly carinate laterally, with prominent and sharply pointed anterior angles. Base bisinuate, with the posterior angles sharp and rectangular. Lateral edge fine and complete. Integument covered with very dense round punctures on disc, becoming shortly and obliquely elongate towards sides, with the intervals between punctures forming dense, short, obliquely longitudinal ridges. Middle of prosternum in the male smooth and shiny, with a very fine punctiform setiferous fovea on centre. Prosteral apophysis bent downwards. — Elytra elongate, with subparallel sides, well-pronounced short shoulders, and hardly indicated humeral callus. Integument with well-defined, rather strongly punctured primary rows; the two sutural intervals sparsely punctured and shiny, the following ones with moderately dense punctation, and with tessellate respectively continuous yellowish pilosity on the alternate intervals. Underside of afterbody with fine and comparatively sparse punctation, shiny and sparsely pilose. Mesosternum with very dense, confluent, shortly and transversely lunulate punctation. Metasternum distinctly longer than basal sternite of abdomen. Anal sternite simple in both sexes, without impression. Legs short; the trochanters of anterior femora in both sexes without spine; tibiae straight, with the underside of anterior tibiae in the male flattened and smoothed along its entire length and carinate laterally; basal joint of posterior tarsi distinctly shorter than the unguis joint.

DIMENSIONS. Length 9 1/2 to 10 1/2 mm., width 3 to 3 1/2 mm.

LOCALITIES. Belgian Congo: Funda Biabo, 15-18 Mar. 1914, leg. L. CHARLIERS (1 male, 2 females, holo- and allotype in Musée du Congo Belge); Lulua, Sandoa, Apr. 1932, leg. F. G. OVERLAET (1 female, BCM.); Katanga, Kinda (3 females, BCM.). — Tanganyika territory: Tabora, 9-10 May 1930, leg. P. GÉRARD (2 females, paratypes in Musée du Congo Belge and in Transvaal Museum); Umbugwe (4 spec., paratypes in Naturhistoriska Riksmuseum, Stockholm, and in Transvaal Museum; a further male specimen from the same locality, ex coll. GEBIEN, in South African Museum).

See Plate X, fig. 19.

I name the new species in honour of Dr H. SCHOUTEDEN, Honorary Director of the Musée du Congo Belge at Tervuren.

H. Schoutedeni belongs to the *villosus*-group; it differs from the species of this group as follows:

a. — From *semialatus* KOCH, supra cit., to which it is most allied, by the fully-winged body, the longer metasternum, the distinct shoulders, the subparallel elytra, and in the male by the quite different formation of the underside of the anterior tibiae and the sculpture of the apical joint of the

maxillary palpi (in *semialatus* the sculpture of the underside of the apical joint of the maxillary palpi is the same as on the upper surface, composed of a fine and comparatively sparse, setiferous punctation).

b. — From *dubius* HAAG, 1870, by the non-securiform apical joint of the maxillary palpi in the male, the acute and prominent anterior angles of pronotum (rounded in *dubius*), and by the perfectly different formation of the eyes and tempora.

c. — From *epitragoides* HAAG, 1870, by the much longer antennae (extending only beyond middle of pronotum in *epitragoides*); the flat eyes, which hardly project beyond the genal outlines (whereas they are rotundate and rather prominent in *epitragoides*); the convex and large tempora, the outlines of which are continuous with those of the eyes (in *epitragoides* the tempora are very short and almost straightly narrowed towards the neck, with their outlines including an angle with those of the eyes); the longitudinal punctation of the lateral portions of head and pronotum (round in *epitragoides*); the prominent anterior angles of pronotum (obtusely rounded in *epitragoides*); the broadly sulcate and smoothed underside of anterior tibiae in the male (obsoletely sulcate in the male of *epitragoides*).

d. — From *villosus* HAAG, 1870, and *senegalensis* HAAG, 1870, by the longer antennae; the broadly sulcate and smoothed underside of the anterior tibiae in the male (simple in both sexes in *villosus* and *senegalensis*); the big apical joint of maxillary palpi in the male, which is distinctly longer than are the eyes (distinctly shorter than the eyes in *villosus* and *senegalensis*); and from *villosus* furthermore by the prolonged central lobe of epistome, which is hardly projecting beyond the lateral portions of epistome in the compared species.

e. — From *eclavatus* LESNE, 1920, by the presence of the prosternal fovea in the male (absent in *eclavatus*); the subserrate shape of the proximal joints of antennae (subcylindrical in *eclavatus*); and the different shape of the pronotum, the head and the maxillary palpi in the male.

Himatismus (Curimosphena?) angolanus, nov. spec.

Male unknown; female: blackish brown, antennae, tarsi and trophi reddish brown; moderately shiny, sparsely pilose. — Head above flat, with a shallow impression at each side of supra-antennal portions; covered with a very dense, coarse punctation, becoming longitudinally confluent towards sides, with the intervals between punctures raised to longitudinal, somewhat reticulate ridges. Central lobe of epistome shortly triangular, slightly separated from lateral portions of epistome. Eyes slightly convex, with rounded contours, faintly projecting beyond genal contours, twice as long as broad and about the length of genae. Tempora short. Apical joint of maxillary palpi simple, small, shorter than eyes, with the inner lateral margin much longer than apical margin. Antennae short and slender, extending a little beyond middle of pronotum, becoming compressed and ac-crescent towards apex; third joint very little longer than the fourth; the penultimate joint approximately as long as broad; the apical joint subglo-

bular, as long as broad, narrower but hardly shorter than the previous one. — Pronotum almost square, broadest at middle, there very little broader than long, much broader than head, with the sides subparallel and abruptly, shortly narrowed towards the anterior margin just in front of the latter, very little narrowed towards the base only in front of the posterior angles. Anterior margin straight, finely carinate laterally, with the anterior angles lateral in position and rectangular. Base bisinuate, marginate, only a little broader than anterior margin, with rectangular lateral angles. Lateral carina fine, but sharp and complete. Integument very densely covered with a coarse and round punctation, becoming longitudinally confluent towards sides, with the intervals between punctures forming longitudinal, more or less anastomosing ridges. Prosternum smoothed at middle, with the intercoxal apophysis bent downwards. — Elytra with well-developed shoulders and strongly pronounced humeral callus; the integument rather strongly punctate-lineate, with the intervals between primary rows very finely and sparsely punctured, shiny. Mesosternum densely punctured, with the punctures transversely confluent on disc. Metasternum much longer than basal sternite. Anal sternite simple. Legs moderately long; tibiae straight; basal joint of intermediate and posterior tarsi much shorter than unguis joint.

DIMENSIONS. Length 10 1/2 mm., width 3 1/2 mm.

LOCALITY. Northern Angola: Loanda, 1922 (1 female, holotype in Musée du Congo Belge).

See Plate X, fig. 20.

SYSTEMATIC POSITION. *H. angolanus* is an isolate species, agreeing only with the *Himatismus* s. str. in the formation of the antennae; but it is quite different from the known species of this subgenus in the very peculiar shape of the pronotum. On the other hand it agrees with the species of the *Muelleri*-group in the shortness of the antennae, the abbreviate basal joint of posterior tarsi, and the sparsely punctured elytral intervals; it is readily to distinguish from *Muelleri* and *Pavesi* by the peculiar shape of the slender and square pronotum, the perfectly different proportions of the fine *mandibularis*-like antennal joints, and the shape of the head.

Another *Himatismus* with sparse punctation of the elytral intervals (1) is the Indian *fasciculatus* F. with its subspecies *luctuosus* from Madagascar. From these forms the new species is very different in the perfectly filiform, very fine and slender, *mandibularis*-like antennae (which are stout and subserrate towards the distal end in *fasciculatus* and its subspecies), the formation of the epistome (triangular as in the other species of *Himatismus* in *angolanus*, broadly rounded apically in *fasciculatus*), the abbreviate basal joint of the posterior tarsi (at least as long as the unguis joint in *fasciculatus*), the absence of a femoral fringe of hairs (a particular which is peculiar

(1) AGAIN another species with sparsely punctured intervals of the elytra seems to be *H. seriatus* GEBIEN, 1937. from the Italian Somaliland; I do not know this species, but according to the illustrated description, it seems to be quite different from *H. angolanus*, but it belongs to the *buprestoides*-group, where it stands nearest to *H. trivialis*.

to *fasciculatus* and its forms among all the other *Himatismus*), and the differently shaped head and pronotum.

I may here mention that a form of the Indian *fasciculatus* occurs also in Southern Africa; there is a male from Pungwe Bay in Port. East Africa (Dec. 1903, leg. P. KRANTZ) in the Transvaal Museum, which differs only slightly (perhaps subspecifically) from *fasciculatus* subsp. *luctuosus* FAIRMAIRE from Madagascar. As many essential characters of *H. fasciculatus* so far have been overlooked by the authors, I give here a description of the African specimen from Pungwe Bay :

Body black, appendages brown; rather shiny, sparsely pilose. — Head above plane, narrower than pronotum, densely covered with coarse and round punctures, which are a little more scattered along midline. Central lobe of epistome triangularly produced, but with the apex broadly rounded, well-separated from lateral portions of epistome. Eyes almost flat, very little convex, very slightly projecting beyond genal contours, almost continuous with the temporal outlines, much longer than broad, and a little longer than genae. Tempora with minute subparallel portion, then straightly narrowed towards neck. Apical joint of maxillary palpi small, simple, shorter than the longitudinal diameter of eyes, with the inner lateral margin much longer than the apical margin. Antennae only slightly accrescent and compressed towards apex, stout and long, extending a little beyond pronotal base; third joint one and a half times as long as broad, only very little longer than the fourth; the following joints becoming gradually but little shorter and slightly broader towards the apex; the distal joints densely pubescent; the ninth distinctly longer than broad; the tenth joint a little broader than long; the apical joint subglobular, a little longer than broad and narrower but hardly shorter than the penultimate joint. — Pronotum slender, broadest before middle, hardly broader than long, comparatively little broader than head, with the sides slightly rounded and narrowed towards anterior margin, slightly narrowed and distinctly sinuate in front of base. The latter slightly bisinuate, distinctly broader than anterior margin, with sharp and rectangular posterior angles. Anterior margin straight, carinate laterally, with the anterior angles depressed, not produced and obtusely rectangular. Lateral margination fine, but sharp and complete. Integument densely covered with very coarse and round punctures, somewhat scattered discally. Middle of prosternum smooth and shiny, with large, transversely oval, setiferous fovea on centre; along the anterior border of this fovea with arcuate and fine carina. Prosternal apophysis bent downwards. — Elytra with obliquely sloping shoulders and well-developed humeral callus. Integument with coarsely punctured and strongly pronounced primary rows, with the intervals between rows uniformly covered with fine and sparse punctures, very sparsely pilose and with the indication of very small and little obvious hairy patches on the odd intervals. Underside of afterbody with fine and rather sparse punctation, shiny, sparsely pilose. — Legs moderately long; the trochanters of anterior femora without spines; distal half of the underside of femora with deeply sulcate, longitudinal tibial socket, the proximal

half with a fringe of long yellowish hairs; tibiae straight, the underside of anterior tibiae sulcate basally, subcarinate distally, that of the intermediate tibiae sulcate proximally, simply convex distally; and the underside of posterior tibiae sulcate proximally and with an impunctate, shiny and slightly convex median line distally. Basal joint of posterior tarsi practically as long as the unguis joint, or a little shorter.

DIMENSIONS. Length 10 mm., width 3 mm.

LOCALITY. Port. East Africa: Pungwe Bay, Dec. 1903, leg. P. KRANTZ (a single male, in Transvaal Museum).

Himatismus (Curimosphena) abyssinicus, nov. spec.

Female unknown; male: brown, the maxillary palpi and tarsi more or less reddish; dull, pilose. — Head transverse, above covered with a rugose, elongate and confluent punctation, with the intervals between punctures raised to irregular, shortly longitudinal rugosities, and with a narrow, slightly elevate, impunctate median line on vertex, posteriorly dilated into a roundish smooth spot. Central lobe of epistome broad, in dorsal view appearing as if broadly rounded anteriorly, in cephalic view sloping downwards and with the apical margin triangular; sharply separated from lateral portions of epistome. Eyes strongly prominent, subconically convex, with the transverse diameter a little longer than the longitudinal one, extremely projecting beyond genal outlines and including with the latter an acute angle. Genae longer than eyes, strongly rounded and strongly narrowed towards inner margin of eyes, with a minute and narrow incision in front of eyes. Temporal outlines continuous with those of the posterior margin of eyes, and running in the direction of the latter towards neck. Apical joint of maxillary palpi moderately securiform, with the apical margin a little shorter than the longitudinal diameter of eyes, and one and a half times as long as the inner lateral margin. Antennae stout, strongly accrescent and becoming compressed towards the apex, extending a little beyond pronotal base; third joint the longest, one and a half times as long as broad, little longer than fourth; the ninth joint about as long as broad; the tenth strongly transverse; apical joint subglobular, as long as broad, narrower and a little shorter than penultimate joint. — Pronotum transverse, broadest before or at middle, there much broader than head, a little more than one and a half times as broad as long, with a transverse impression in front of the base discally, with the sides subparallel at middle, rounded and shortly narrowed towards apical margin, slightly rounded and considerably narrowed towards base, and slightly sinuate in front of posterior angles. Anterior margin slightly emarginate at middle, with the lateral angles obtusely rounded. Base bisinuate, carinate laterally, with sharp and rectangular posterior angles. Prosternum with an elevate, large and abraded tubercle at middle, bearing a small, round setiferous fovea. Prosternal apophysis cuneate, horizontally projecting beyond coxal cavities, perpendicularly declivous apically. — Elytra with strongly developed, nearly rectangular shoulders, and well-pronounced humeral callus. Integument with impressed punctate primary

rows, becoming mixed up with the sculpture of intervals towards sides; the even intervals uniformly covered with rather dense punctures, uniformly pilose; the alternate and odd intervals with tessellate, hairy patches, and between patches with a very dense, rugose, almost foveate punctation, becoming more extended towards sides. Underside of afterbody very shiny and sparsely punctured discally, very densely punctured and dull laterally. Anal sternite with a slight transverse impression in front of apical margin, and coarsely, almost foveately punctured on apical half. — Legs moderately long; the trochanters of anterior femora without spine; tibiae straight, dilated towards the apex; the underside of anterior tibiae excavate at apical half, with the middle of the outer margin produced into a rather strong and pointed tooth; outer surface of anterior tibiae with a sharp median carina along apical half, prolonged into an acute and large apical angle; the inner contours of the anterior tibiae furnished with a fringe of fine and dense bristles. Tarsi elongate; the basal joint of intermediate and posterior tarsi much shorter than ungual joint.

DIMENSIONS. Length 12 to 13 mm., width $3 \frac{1}{4}$ to $4 \frac{1}{2}$ mm.

LOCALITY. Abyssinia, Ansaba, July 1871, leg. ANTINORI (2 females, holotype in Zoolog. Sammlg. d. Bayr. Staates, Muenchen; paratype in Transvaal Museum).

See Plate XI, fig. 21.

The two typical specimens of the new species have been labelled originally as « allotype » and « paratype » of *H. inconspetus* HAAG, 1877; the holotype of *inconspetus* (a female), however, coming from Bogos, belongs to the *variegatus*-group, whereas the supposed allo- and paratypical males from Ansaba represent the present new species *abyssinicus*, belonging to the *incisus*-group.

H. abyssinicus seems to be related to *H. incisus* GEBIEN, 1937; it is, however, readily to distinguish from the latter in the presence of the prosternal fovea in the male, the less broad genal emargination, the subconical eyes, and in the different formation of the tempora.

H. inconspetus, which GEBIEN, 1937, mentions to represent the nearest ally to *H. incisus*, could be referred to the new species, except for the shape of the anterior tibiae in the male. In the new species the anterior tibiae are in the male strongly dentate underneath (as it is the case in *incisus*), whereas the male of *inconspetus* GEBIEN, 1937 (nec HAAG, 1877) « hat keinen Zahn an den Vorderschienen »; on the other hand *inconspetus* GEBIEN, can not be referred to the typical *inconspetus* HAAG, as the latter does not show any kind of a genal emargination or incision (which, however, is attributed to his *inconspetus* by GEBIEN).

Himatismus (Curimosphena) Terryi, nov. spec.

Black, the apices of the maxillary palpi and tarsi reddish brown; moderately shiny, densely pilose. — Head transverse, above with a rather broad, hardly raised, impunctate and shiny longitudinal spot along midline of vertex, which does not extend to the epistome; on each side from the

median spot covered with almost continuous longitudinal striae, the frontal-epistomal surface with transversely lunulate strigae or transversely elongate punctures. Central lobe of epistome broadly triangular, well-separated from the lateral portions of epistome by a minute sinuosity. Eyes completely free, with all margins, except for the inner one, strongly projecting from cephalic outlines, and appearing as if only with the inner border attached to a somewhat peduncular lobe of the head; viewed from above, the eyes show a globular shape, with the transverse diameter approximately as long as the longitudinal one. Genae strongly rounded, distinctly longer than eyes and separated from the latter by a deep and rather large emargination. Tempora straightly dilated towards neck, leaving exposed the entire posterior margin of eyes, and in contact with the latter only at their inner margin. Apical joint of maxillary palpi almost as long as are the eyes, in the male slightly securiform, with the apical margin a little longer than inner lateral margin; in the female much longer than broad. Antennae stout, strongly accrescent and compressed towards apex, hardly reaching the pro-rotal base; third joint little longer than the fourth; the distal joints, beginning with the eighth strongly transverse; the penultimate joint nearly twice as broad as long; the apical joint hardly shorter, but narrower than the previous one. — *Pronotum* strongly transverse, flattened, broadest at middle, there much broader than head, and about one and a half to one and two thirds times as broad as long, with a rather strong transverse impression in front of the median lobe of base, and on each side with a slight transverse impression at middle of the lateral surface. Sides subparallel from the anterior margin to about middle, then comparatively strongly narrowed towards base and slightly sinuate in front of posterior angles. Anterior margin straight, with broadly rounded lateral angles. Base with the median portion lobularly produced backwards, carinate laterally, and with the posterior angles slightly obtusangular. Lateral edge of pronotum obtuse. Integument very densely covered with a coarse and round, nearly confluent punctation throughout. Middle of prosternum in the male with a rather large, transversely oval setiferous fovea; the posterior margin of the latter with duplicate margination. Prosternal apophysis cuneate, short, horizontally projecting beyond coxal cavities, with perpendicular apical declivity. — *Elytra* with strongly developed shoulders and strong humeral callus, the latter more pronounced in the female than in the male. Integument with well-defined punctate primary rows; the two sutural intervals and the following even intervals shiny, with fine and comparatively sparse punctation; the intervals 2, 4, 6 and 8 clothed by a uniform, brownish to yellowish pilosity; the alternate odd intervals covered with a very dense and rough, rugose punctation, dull, interrupted by small to rather large, slightly elevate patches, which are covered with fine and conglomerate punctures and clothed by a tessellate dense, very short and somewhat scaly pilosity of a paler yellowish. Mesosternum densely and rugosely punctured. Under-side of afterbody shiny, with fine and less dense punctation discally, becoming more concentrated towards sides. Anal sternite with foveate punc-

tation on apical half, in the male with a slight transverse impression in front of apical margin. Legs moderately long, shaped as in *abyssinicus* and with identical distinctive characters in the male, but stouter and shorter.

DIMENSIONS. Length 13 1/2 to 15 1/2 mm., width 4 1/2 to 5 1/2 mm.

LOCALITIES. Port. East Africa: Pungwe Bay, Dec. 1903, leg. P. KRANTZ (1 couple, holo- and allotype in Transvaal Museum); Masiene, Dec. 1923, leg. R. F. LAWRENCE (1 female, paratype in South African Museum). — Nyasaland: Pemba Bay, 1904, leg. P. A. SHEPPARD (1 female, S.A.M.); Lukuledi (1 male, Zoolog. Staats Sammlg., Muenchen); Namupa (1 female, Zoolog. Staats Sammlg., Muenchen).

The new species is named after Mr WILLIAM B. TERRY, field-executive of the University of California African Expedition 1947-1949.

See Plate XI, fig. 22.

SYSTEMATIC POSITION. This is another new species of the *incisus*-group. As to the shape of the eyes and the genae it resembles much *incisus* GEBIEN; it differs from this species in the male by the presence of the prosternal fovea, and the much less securiform apical joint of the maxillary palpi. From *abyssinicus* KOCH, supra cit., it is readily to distinguish in the extremely prominent eyes; in the much broader genal emargination; the more flattened and broader pronotum, which shows a lateral impression (absent in *abyssinicus*); the scaly tessellate spots on the elytra; the much denser pilosity of body; and in the less broadened apical joint of the maxillary palpi in the male.

Himatismus (Curimosphena) Terryi swazinus, nov. subsp.

Differing from the forma typica of *H. Terryi* in the more transverse eyes and in the structure of the tessellate spots on elytra. The eyes are more strongly projecting beyond the cephalic outlines, being distinctly broader than long in dorsal aspect. The tessellate patches on the elytra are not adherent, as in the forma typica, but form semierect tufts of hairs, projecting over the level of the elytral surface.

LOCALITY. Swaziland, Lebombo Mountains, Dec. 1928, leg. A. ROBERTS (1 female, holotype in Transvaal Museum).

Himatismus (Curimosphena) Terryi coniois, nov. subsp.

Another new subspecies of *H. Terryi*, which differs from the typical form in the slightly conical shape of the eyes, with the transverse diameter of the latter distinctly longer than the longitudinal one; the minutely prominent and sharply rectangular posterior angles of pronotum; and the tempora which are more dilated towards the eyes than in the forma typica, meeting the eyes at middle of their posterior margin.

LOCALITY. British East Africa, Emali Range, Sultan Hamud, 4,900 to 5,800 ft., Mar. 1940 (1 female ex coll. Coryndon Museum, Nairobi, holotype in Transvaal Museum).

See Plate XII, fig. 23.

Himatismus (s. str.) **cyhostethipes**, nov. spec.

Female unknown; male: blackish brown, the antennae, trophi and tarsi reddish; dull, densely pilose. — Head above with transverse strigae, becoming longitudinal along eyes, scattered at middle of vertex, and resolved into short and transversely elongate punctures on epistomal surface. Central lobe of epistome shortly triangular, slightly separated from the lateral portions of epistome. Clypeal sutures complete, united at middle and forming a sharply impressed arcuate line, which separates the epistomal surface from the frontal one. Eyes oval, and rather faintly prominent, including an obtuse angle with the genal outlines, continuous with temporal contours, much longer than broad and much longer than adocular portion of genae. Tempora straightly narrowed towards neck. Apical joint of maxillary palpi simple, much longer than broad, with the inner lateral margin one and a half times as long as apical margin. Mandibles enlarged, with pointed and strongly developed, porrect upper tooth. Antennae short, at most reaching the middle of pronotum, with all joints only little longer than broad; third joint a little longer than fourth; ninth joint one and a third times as long as broad, the penultimate joint still shorter; apical joint a little longer than broad, distinctly shorter and narrower than previous joint. — Pronotum much broader than head, a little broader than long, broadest before middle, with the sides rounded and narrowed towards anterior margin, very slightly and straightly narrowed towards base, practically subparallel. The base much broader than anterior margin. Integument densely covered with a very coarse and round punctation along midline, becoming obliquely elongate and longitudinal, confused towards sides, with the intervals between punctures there forming fine longitudinal ridges. Lateral margination distinct only in front of posterior angles. Middle of prosternum smoothed, and with a transversely oval setiferous fovea on centre. Prosternal apophysis abruptly and perpendicularly declivous. — Elytra with small and obtuse shoulders, asperously punctured in the primary rows, with dense punctation on lateral intervals; the pilosity of the third and ninth interval exceedingly tessellate. Underside of afterbody with fine and dense punctation; the pilosity of abdomen very dense, almost clothing the sculpture of the background. Anal sternite simple. Legs comparatively short; underside of tarsi without tomentose soles, spinose. Trochanters of anterior femora without spine. Tibiae straight, with the underside almost simple and shortly sulcate only near to the base. Basal joint of intermediate tarsi much shorter than ungual joint, that of the posterior tarsi longer than ungual joint.

DIMENSIONS. Length 11 1/2 to 12 mm., width 4 mm.

LOCALITY. Northern Little Namaqualand, Richtersveld, Lekkersing, Mar. 1935, leg. Mus. staff (2 males, holotype in South African Museum, paratype in Transvaal Museum).

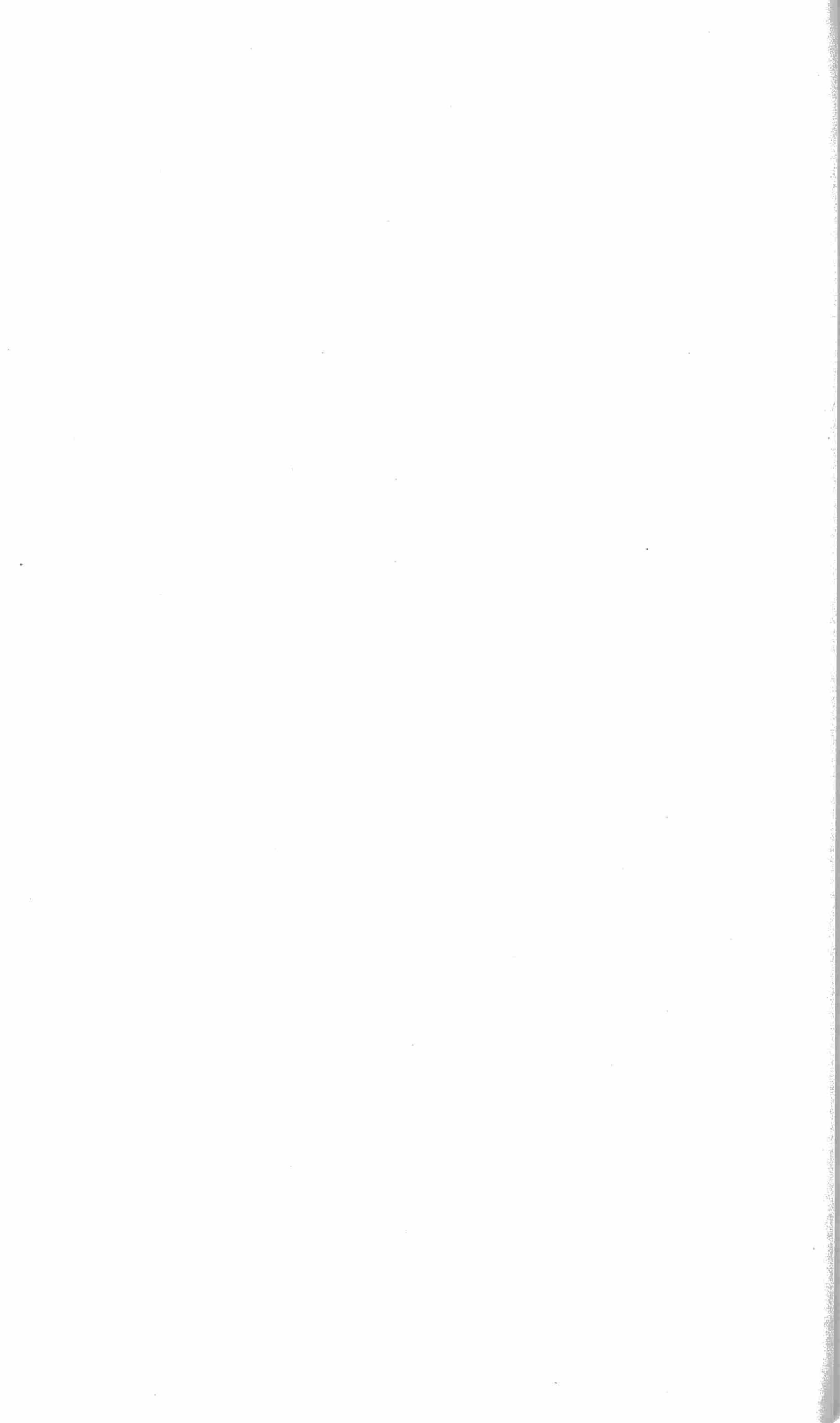
See Plate XII, fig. 24.

SYSTEMATIC POSITION. The new species is very specialized, and represents the single species among all the other *Himatismus*, in which the underside

of the tarsi is not tomentose, but again simply spinose, as it is the case in the genera *Cyphostethe*, *Derosphaerius* and *Aphrotus*.

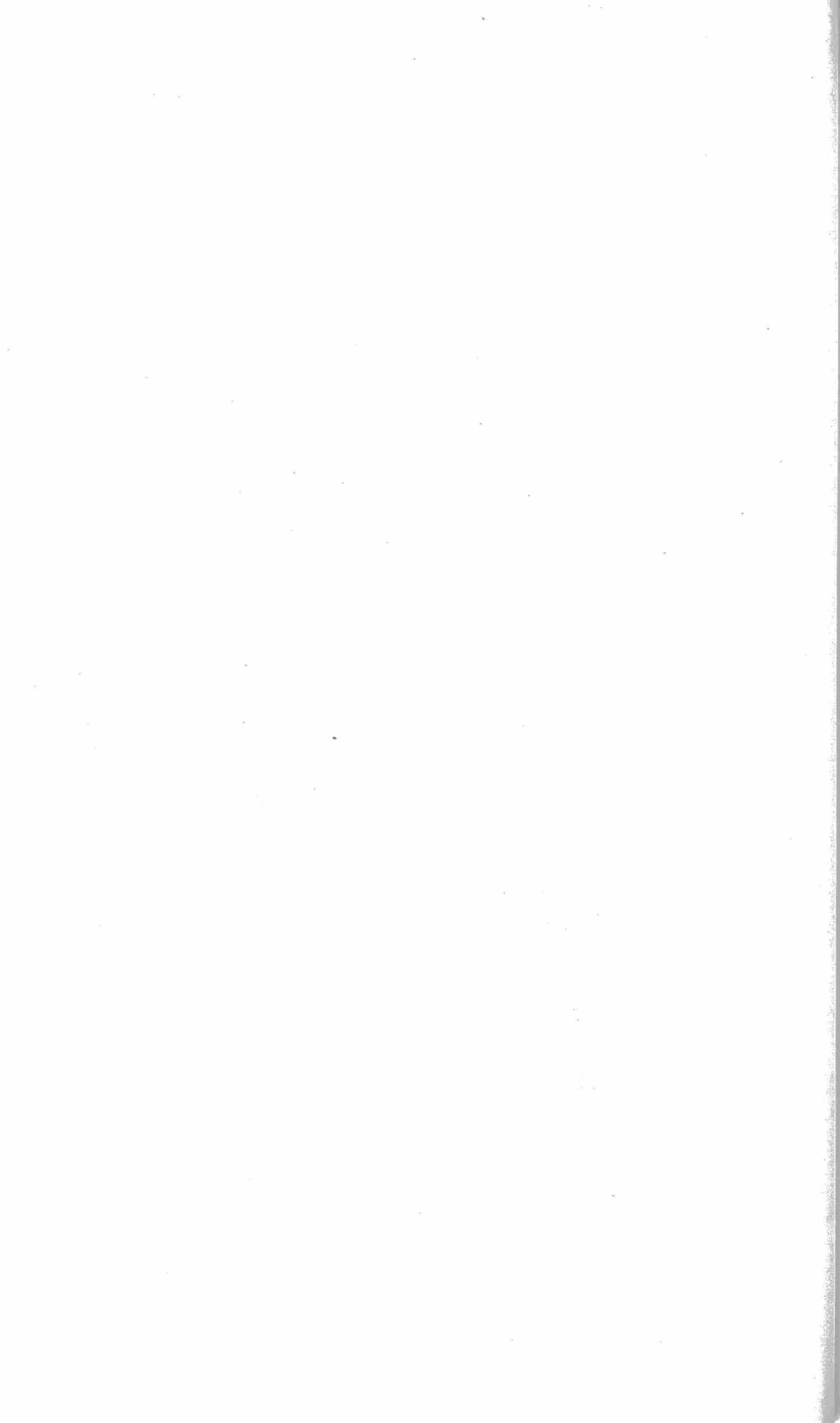
H. cyphostethipes belongs to the subgenus *Himatismus* s. str.; it differs considerably from the two species *mandibularis* ERICHSON, 1843, and *Goetzelmanni* CHATANAY, 1914, as follows:

The underside of the tarsi is spinose. The proportions of the joints of posterior tarsi are different: the basal joint is distinctly longer than the unguis joint (whereas it is much shorter than the unguis joint in the two compared species). The punctures of the pronotum are obliquely and longitudinally confluent even on the disc (they are there round, comparatively sparse and well-separated from each other in *mandibularis* and *Goetzelmanni*). The lateral edge of the pronotum is hardly indicated (but sharply and completely marginate in *mandibularis* and *Goetzelmanni*). The clypeal sutures are complete and transversely fused at the middle of front (almost absent in the two compared species). The much shorter teeth of the buccal fissure (produced into long, horn-like process in the two compared species). The underside of the tibiae is simple in the male (showing a different structure in each of the compared species). From *H. mandibularis* the new species is furthermore differentiated by the porrect upper tooth of the mandibles in the male, and by the punctate surface of the elytral epipleurae (which is densely microgranulate and dull in *mandibularis*).



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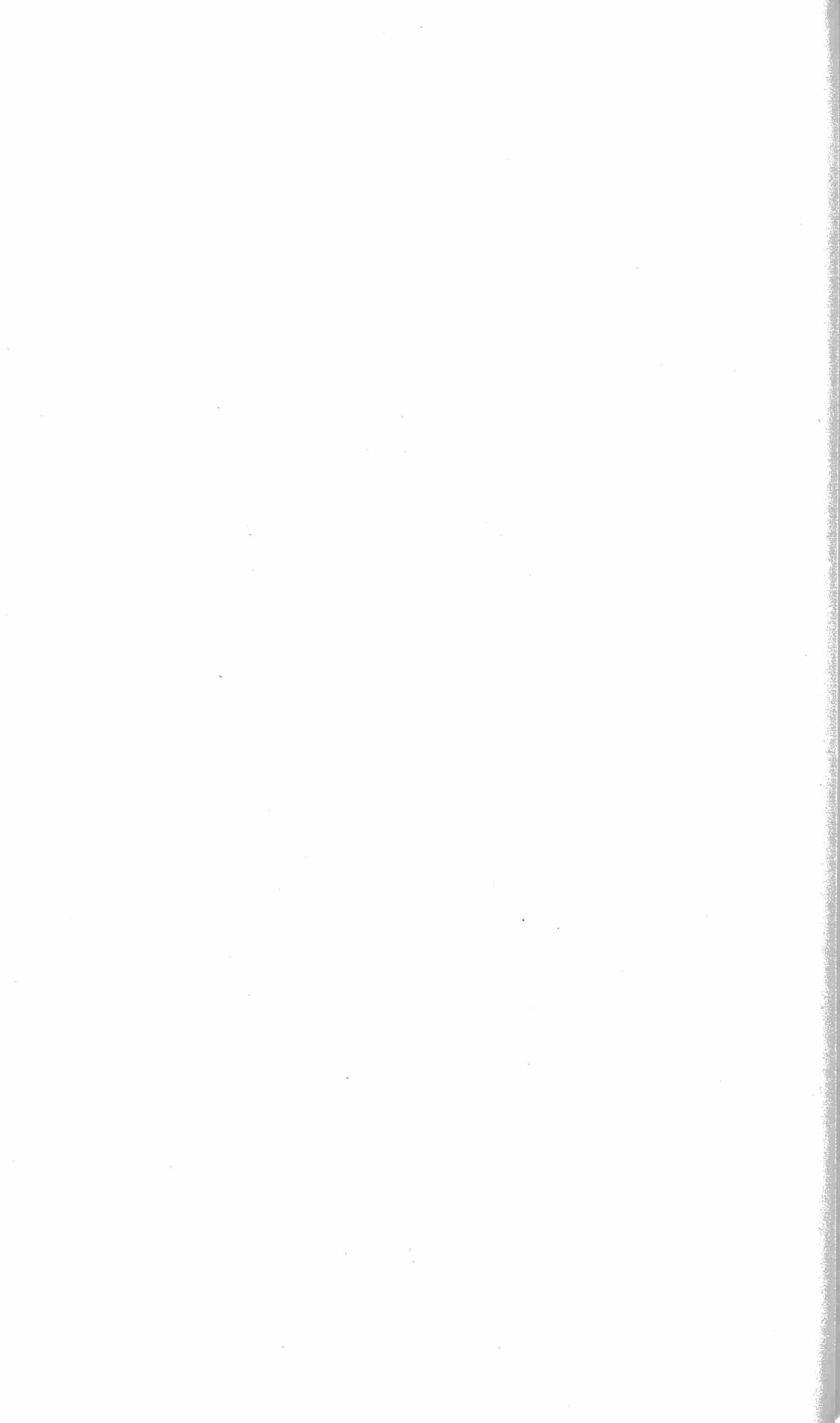


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PLATES



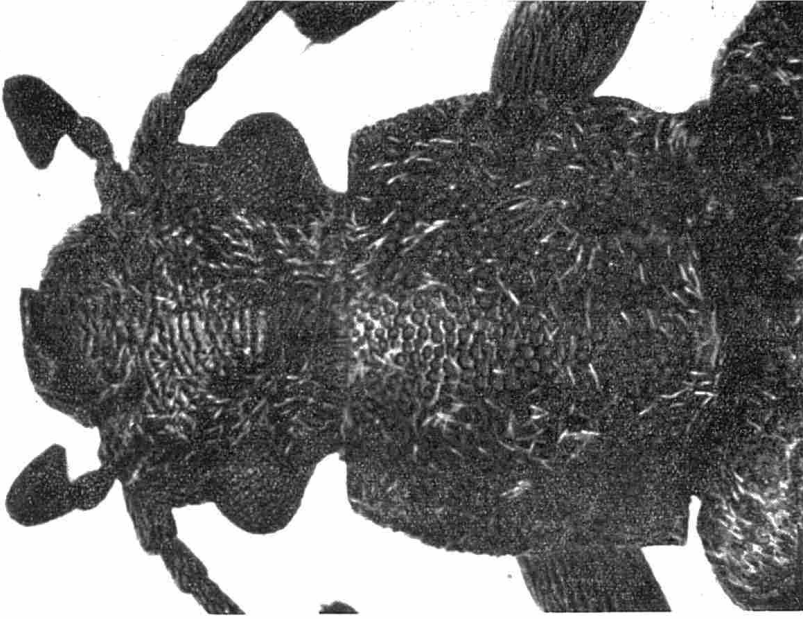


Fig. 2.
Head and pronotum of the male holotype of *H. marginatus*,
n. sp.

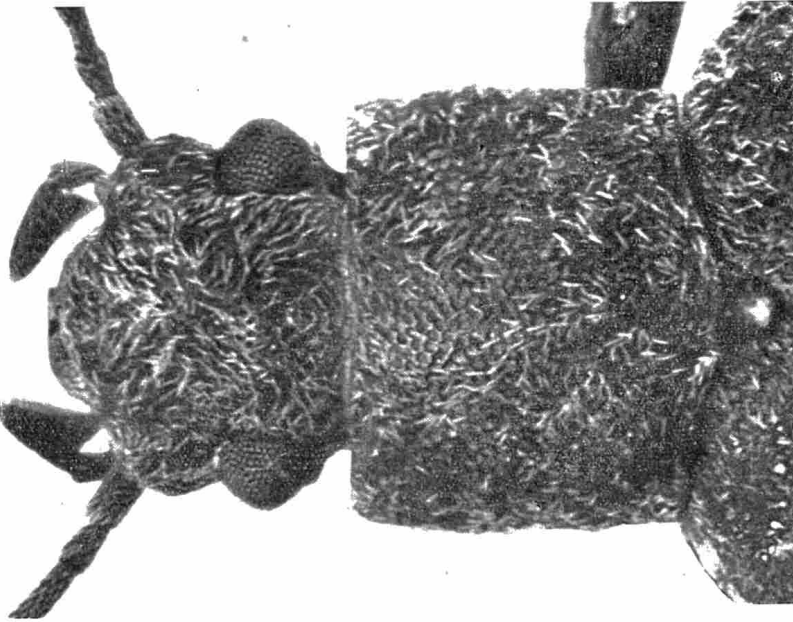


Fig. 1.
Head and pronotum of the male holotype of *H. rhodesianus*,
n. sp.



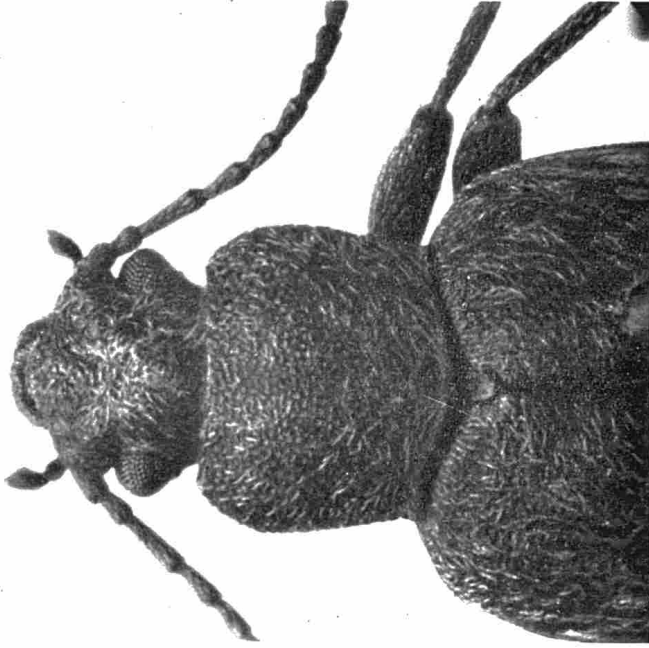


Fig. 4.
Head and pronotum of the male holotype of *Il. Basilevskyi*.
n. sp.

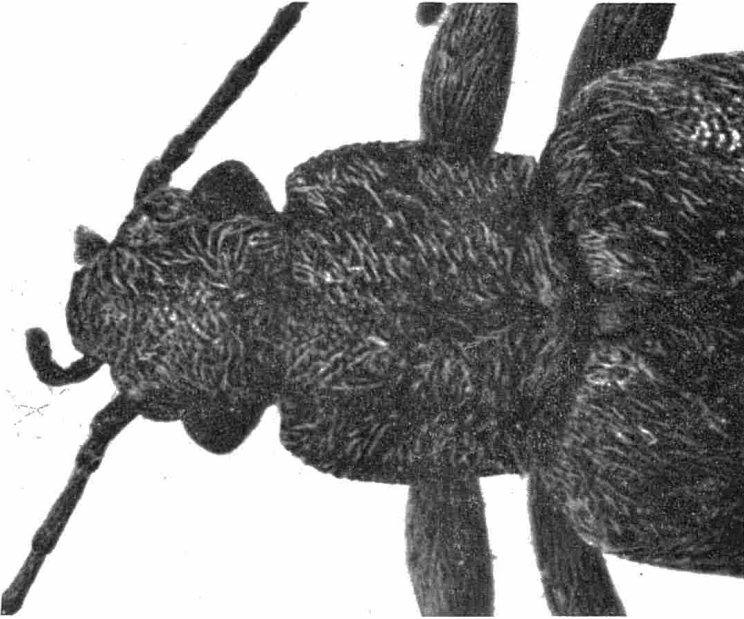


Fig. 3.
Head and pronotum of the male paratype of *Il. Barnardi*.
n. sp.



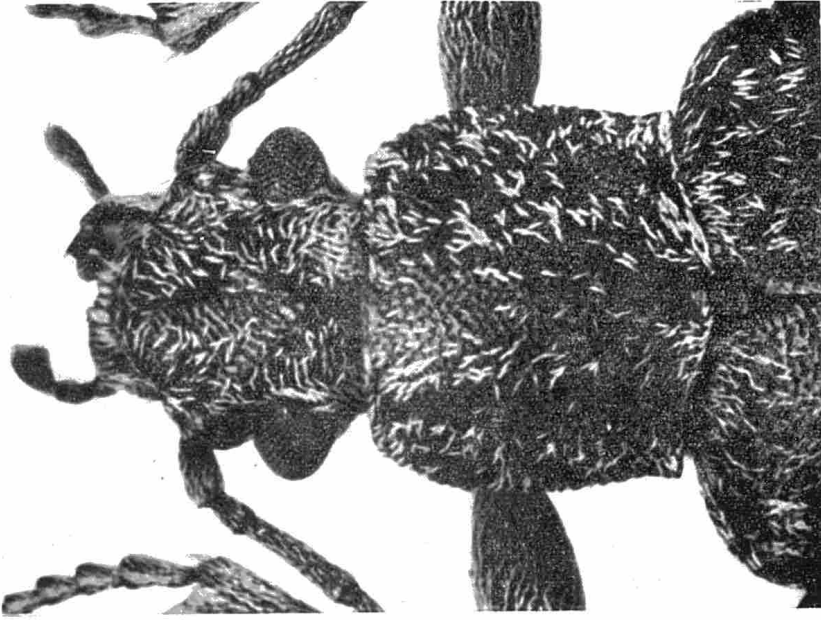


Fig. 6.
Head and pronotum of a male of *H. vestitus* BAUDI.

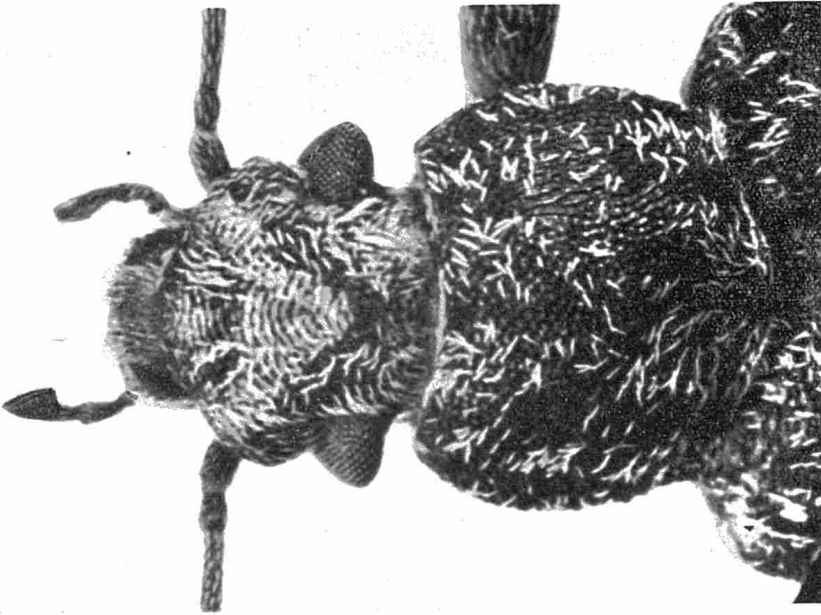
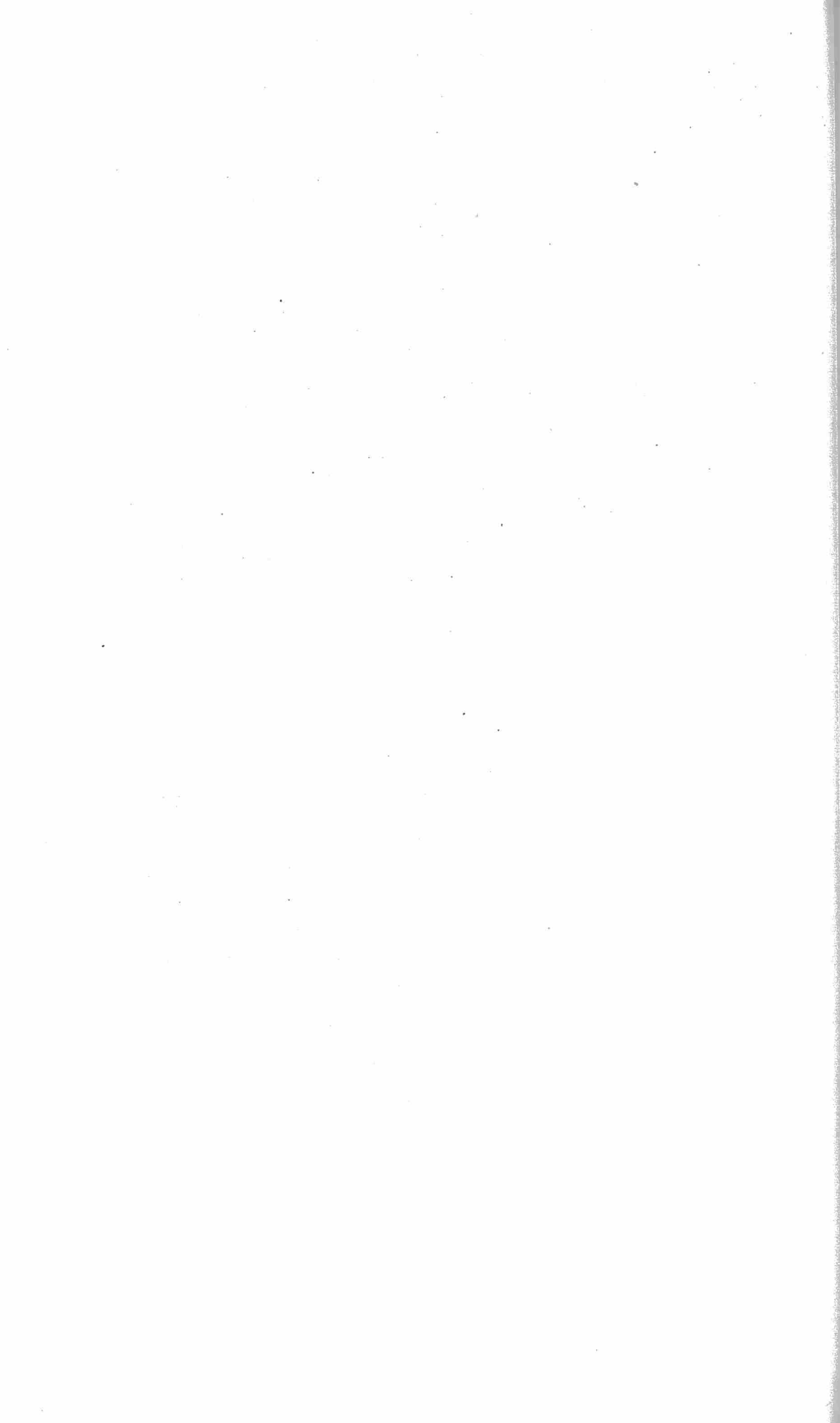


Fig. 5.
Head and pronotum of the male holotype of *H. transcaucasensis*,
n. sp.



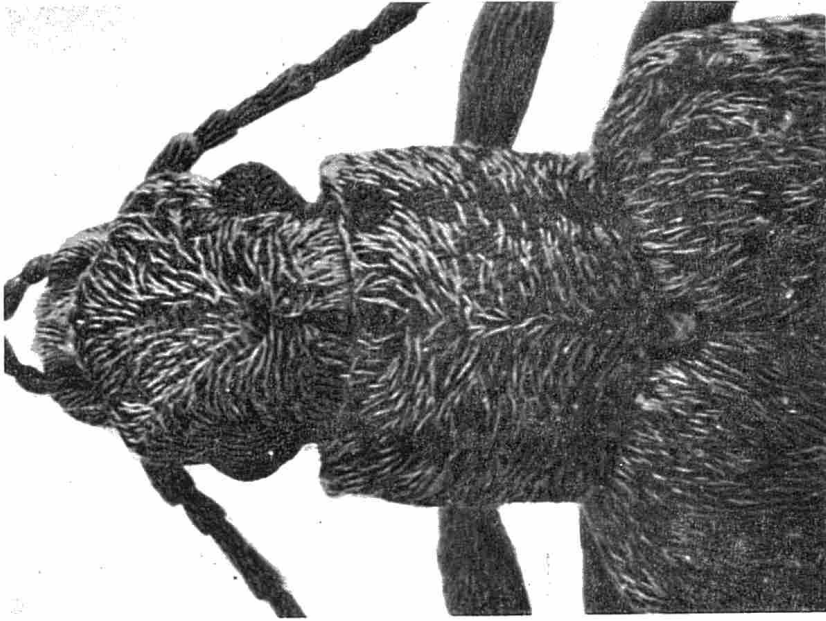


Fig. 8.
Head and pronotum of the female allotype of *H. recitcollis*,
n. sp.

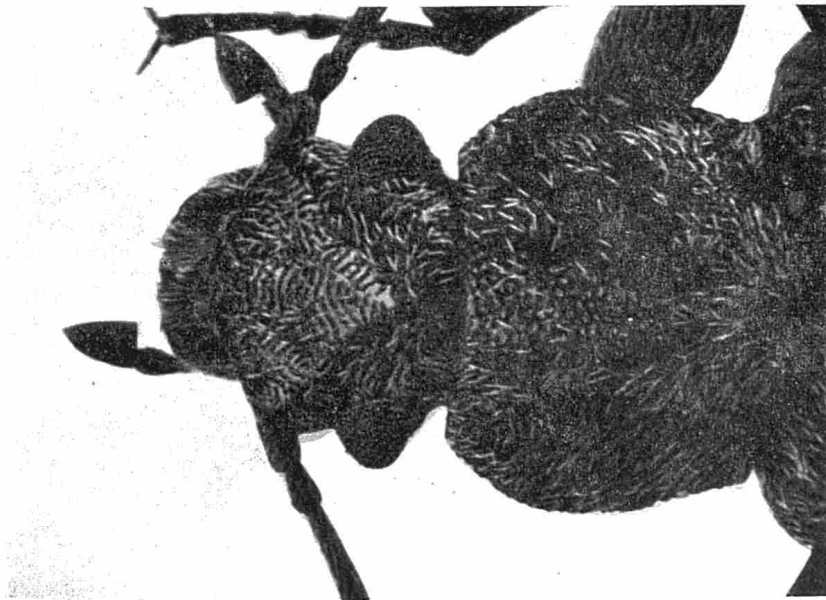
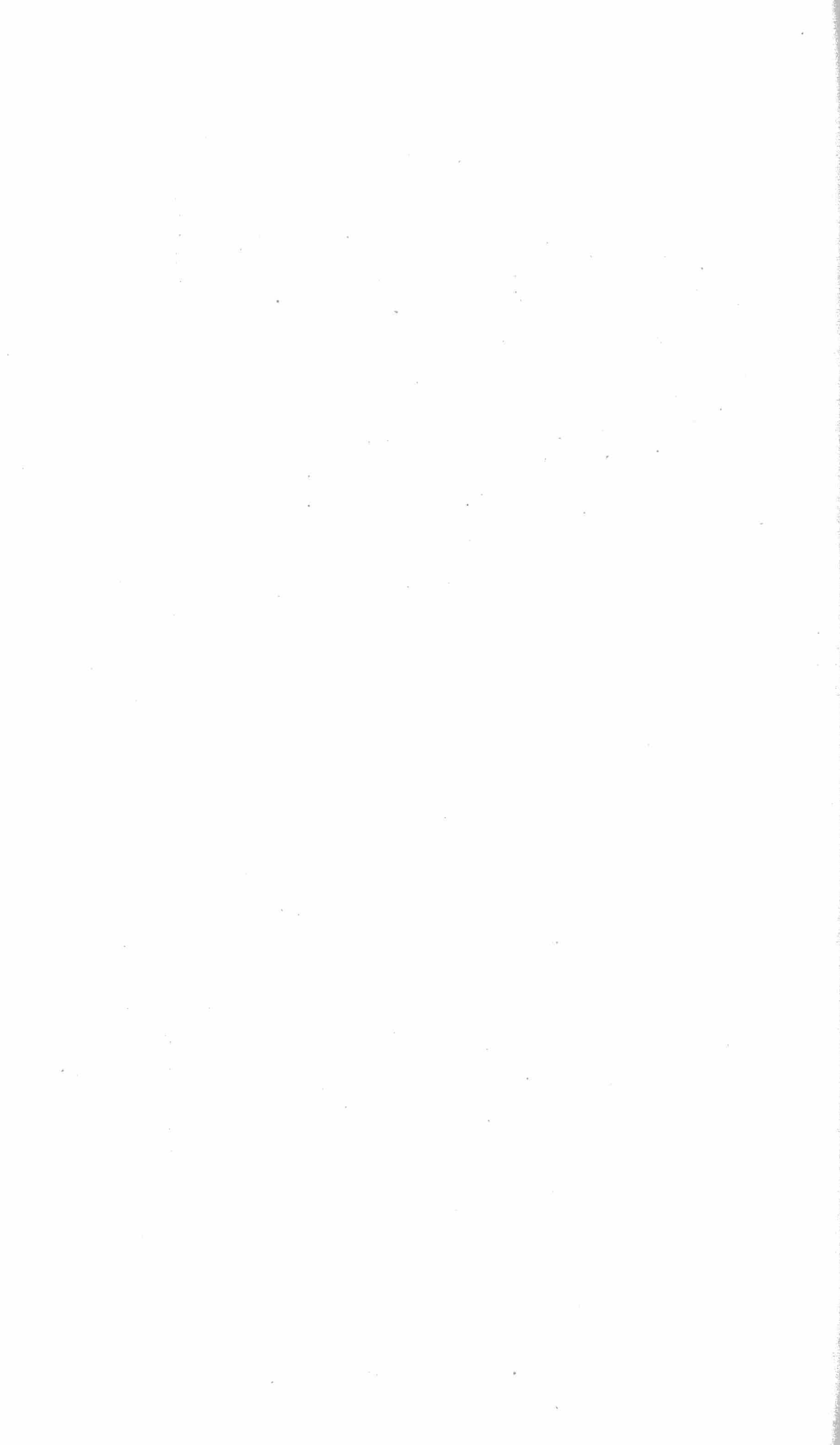


Fig. 7.
Head and pronotum of the male holotype of
H. transcaucasica rotundophthalma, n. ssp.



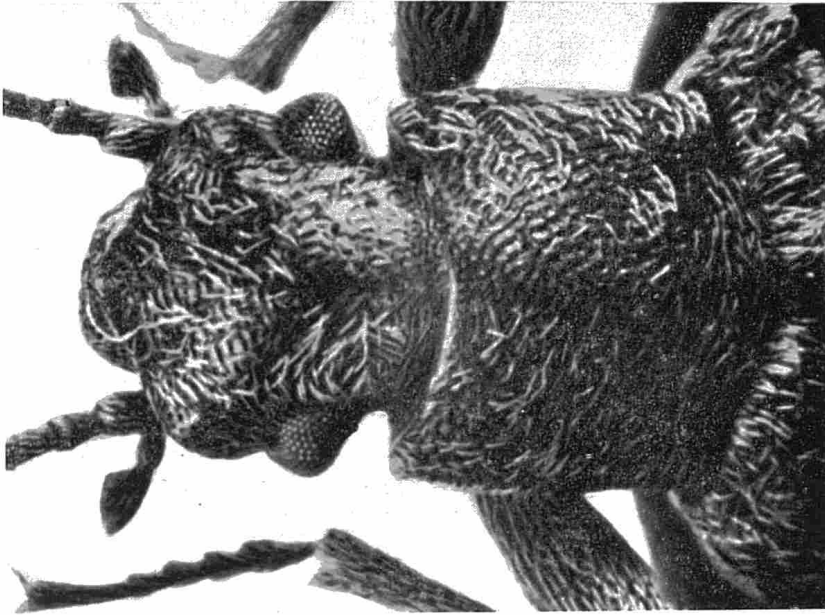


Fig. 10.
Head and pronotum of a male of *H. patruelis* BERTOLONI
from Pretoria.

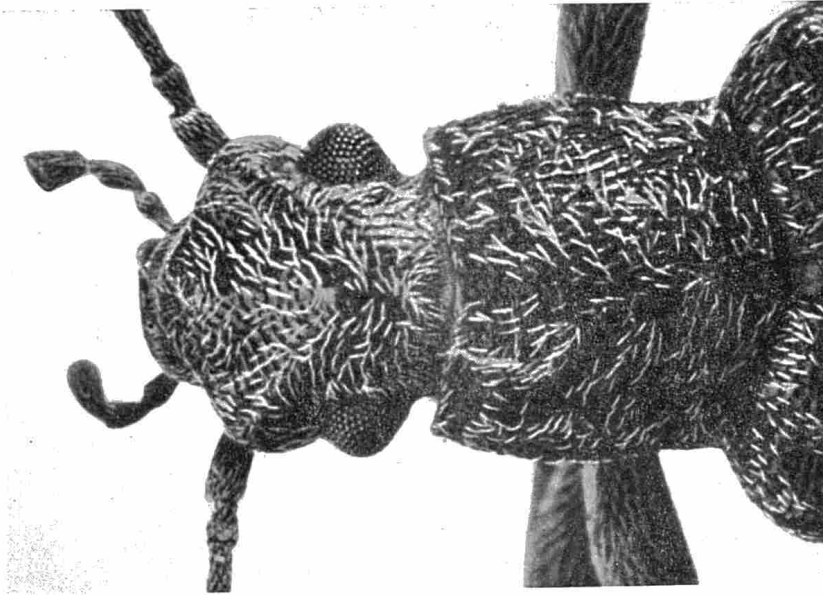


Fig. 9.
Head and pronotum of the male holotype of *H. Vansoni*,
n. sp.



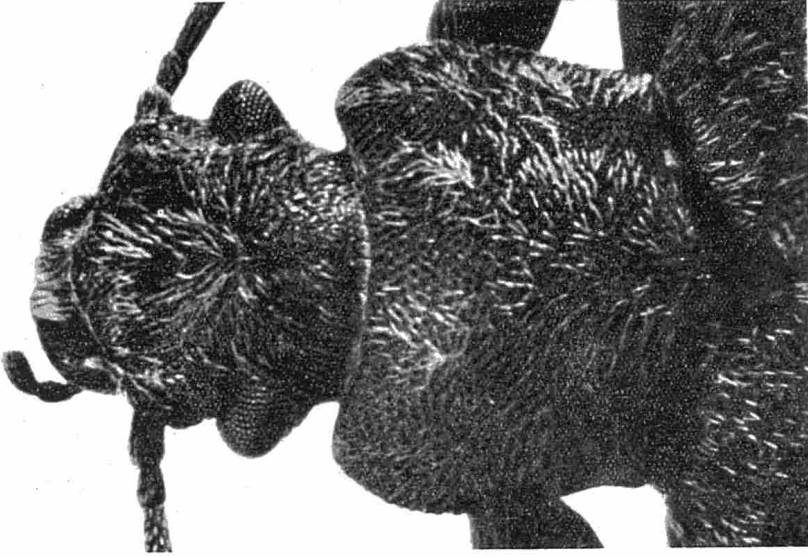


Fig. 12.
Head and pronotum of the female holotype of *H. congolanus*,
n. sp.

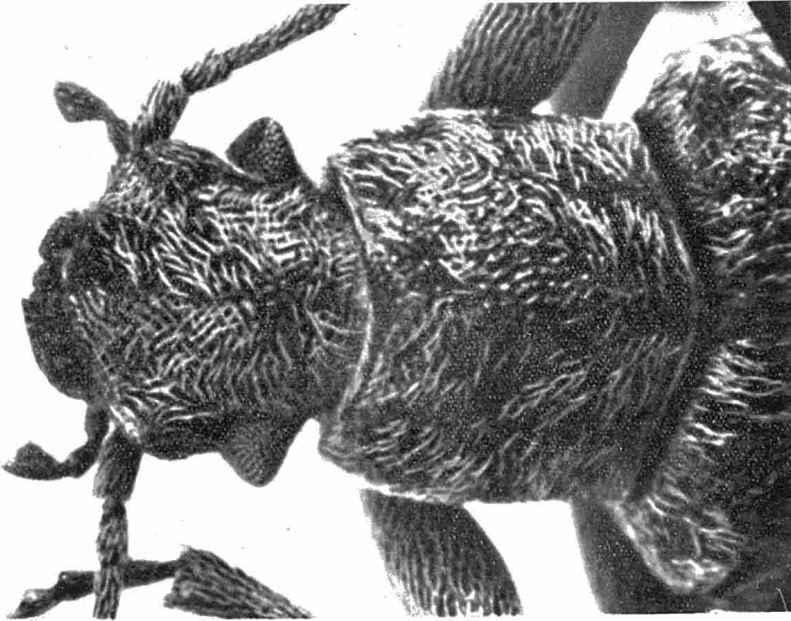


Fig. 11.
Head and pronotum of a male of *H. heterophthalmus*
heterophthalmus CHATANAY.



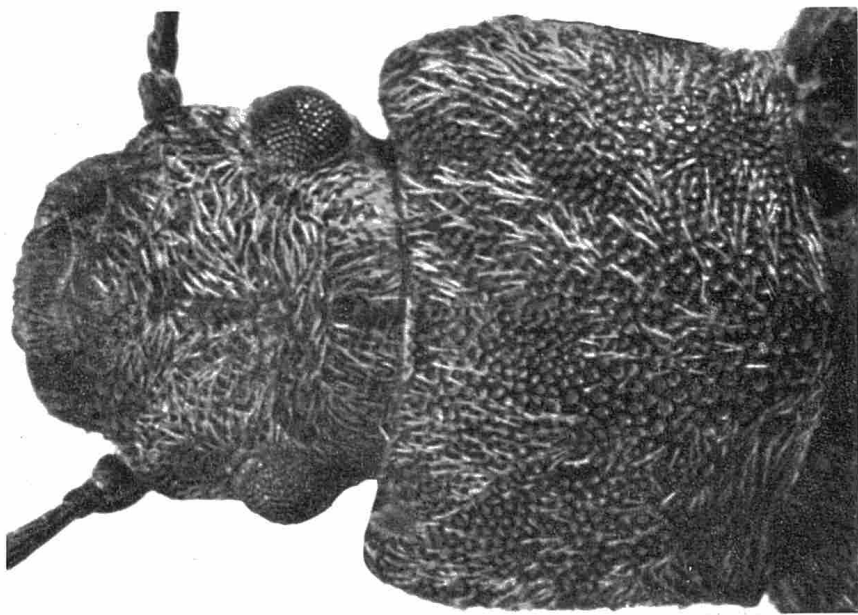


Fig. 13.
Head and pronotum of a female of *H. buprestoides*
buprestoides GERST. from Pungwe Bay in Port. East Africa.

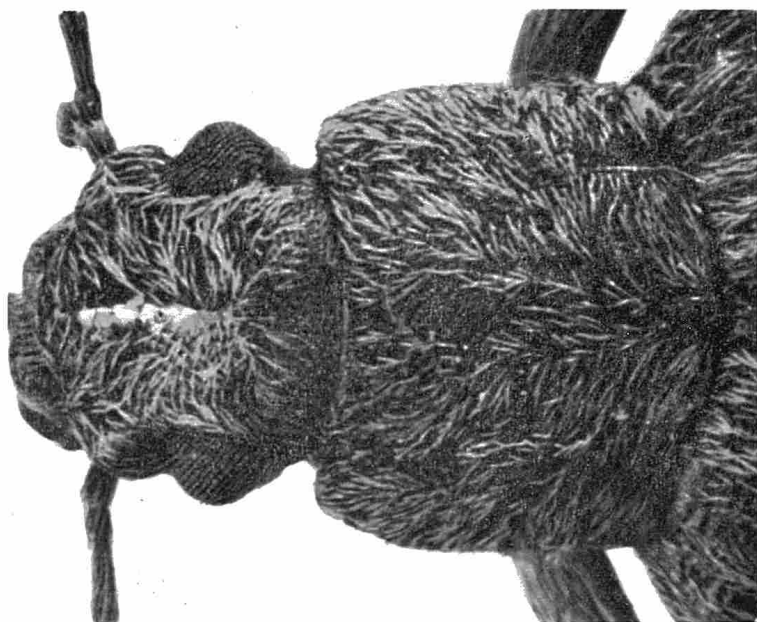


Fig. 14.
Head and pronotum of a female of *H. buprestoides plebejus*
plebejus FATM. from Zululand.



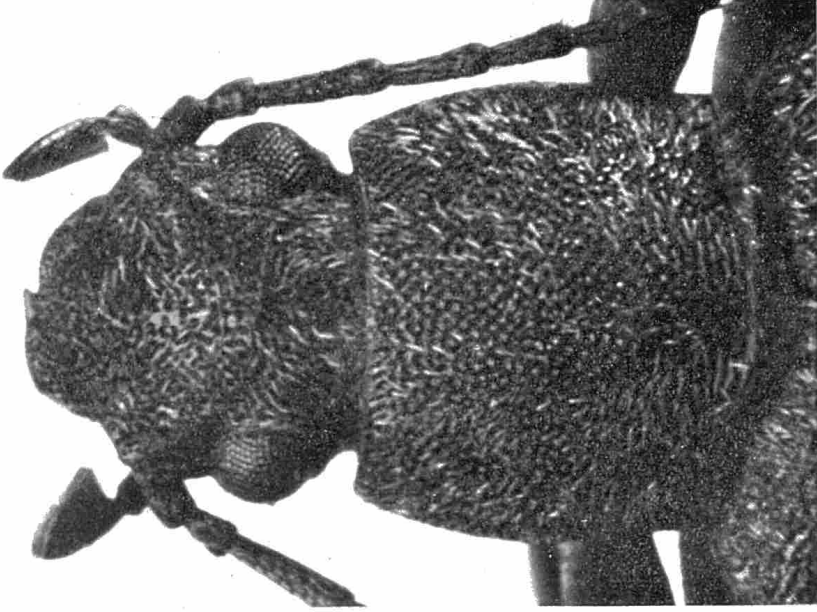


Fig. 16.
Head and pronotum of the male holotype of
H. buprestooides cylindricalis, n. ssp.

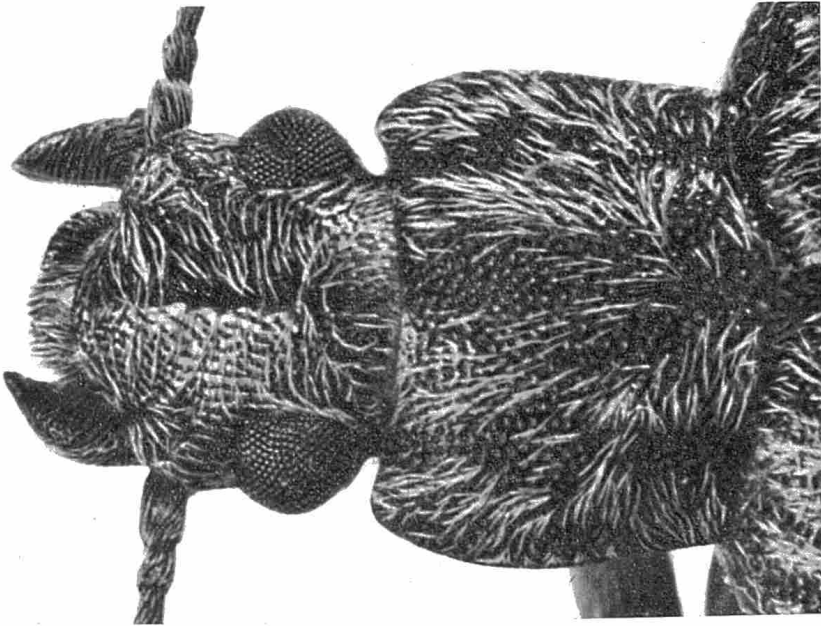


Fig. 15.
Head and pronotum of a male of *H. buprestooides* subsp.
from Albertville in the B. Congo.



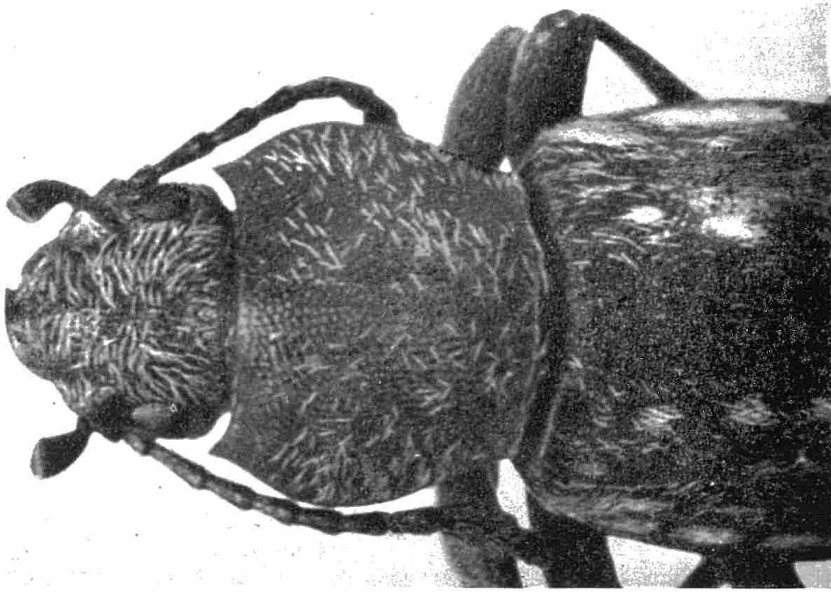


Fig. 18.
Head and pronotum of the male holotype of *H. semialatus*,
n. sp.

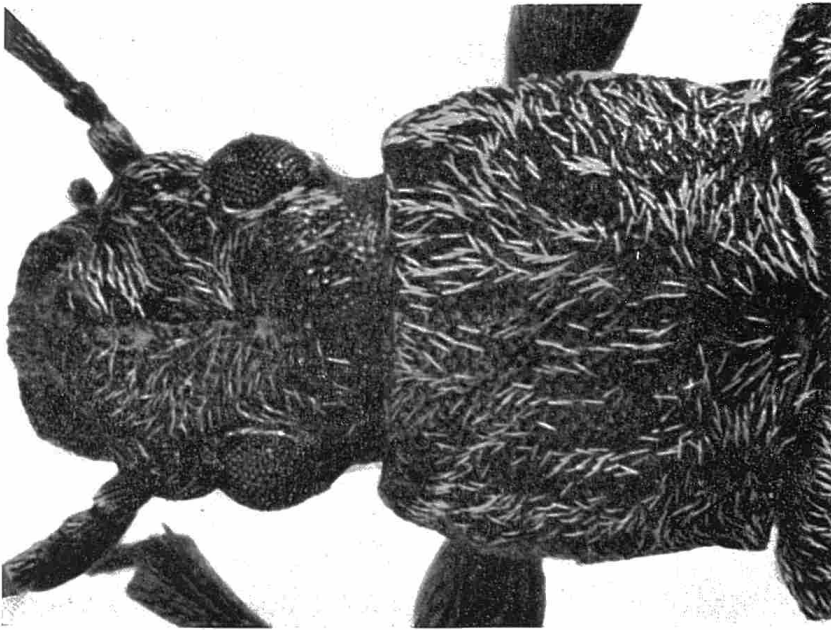
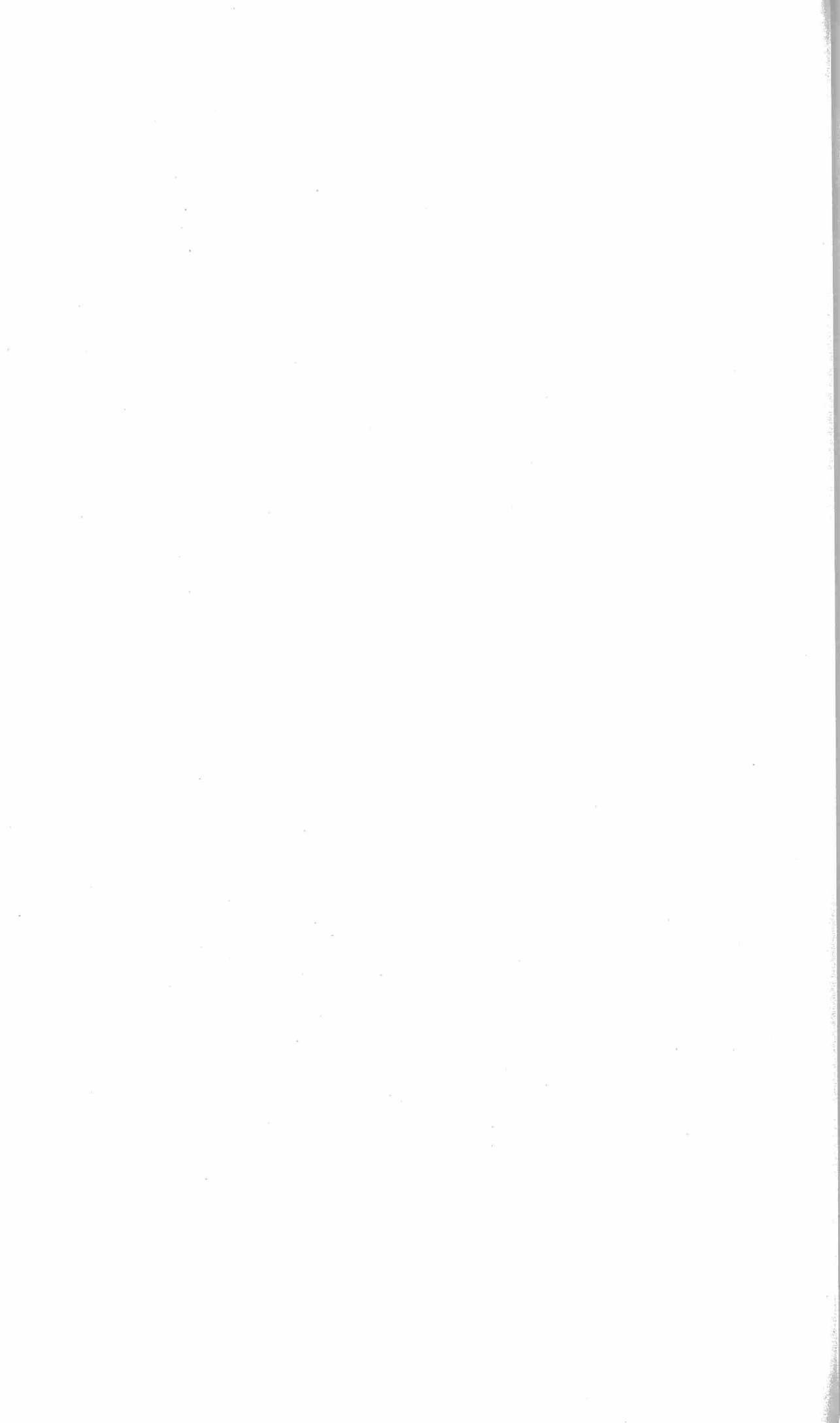


Fig. 17.
Head and pronotum of the female holotype of
H. buprestooides strangulatus, n. ssp.



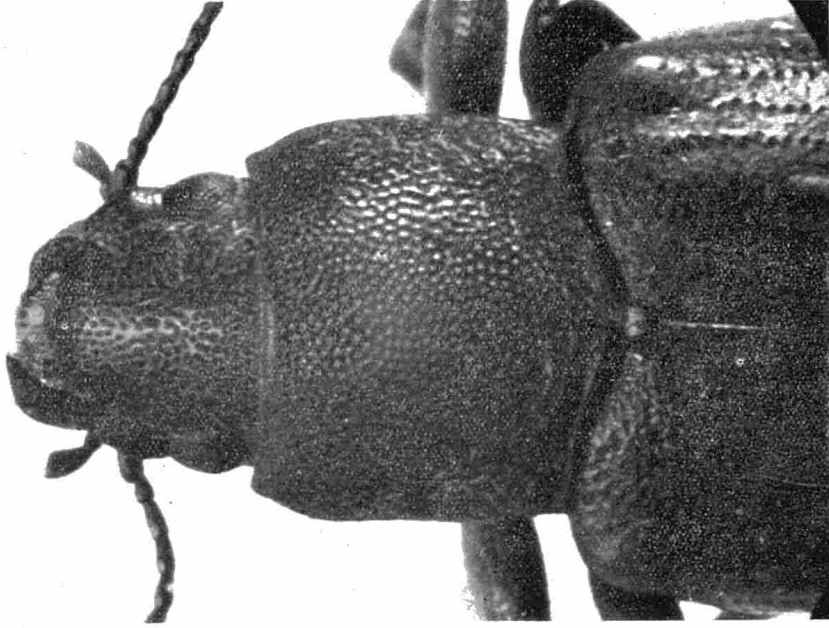


Fig. 20.
Head and pronotum of the female holotype of *H. angolanus*.
n. sp.

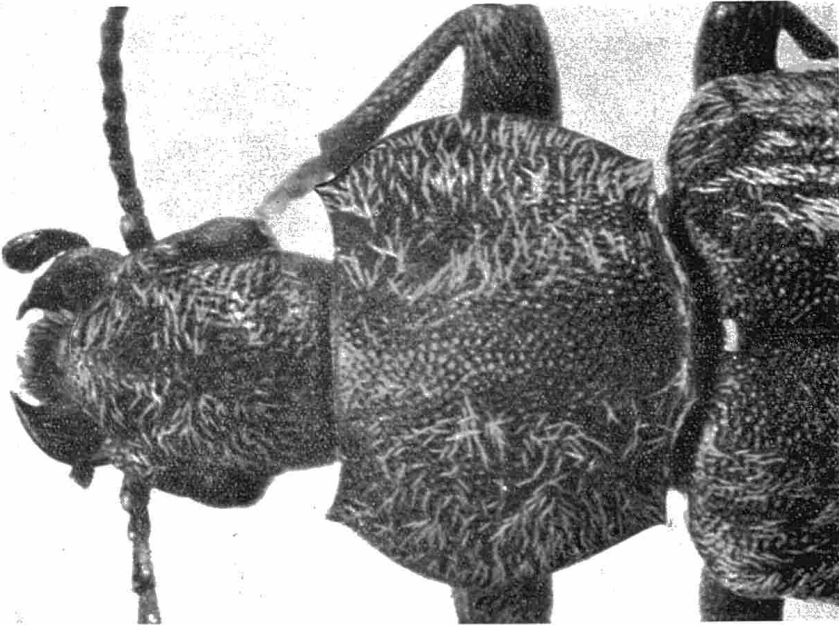


Fig. 19.
Head and pronotum of the male holotype of *H. Schoutedeni*.
n. sp.



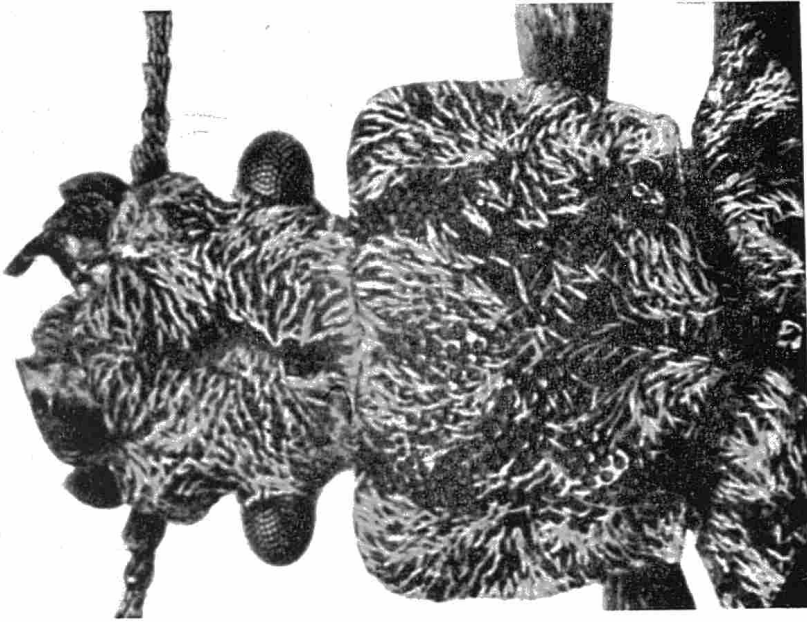


Fig. 22.
Head and pronotum of the male holotype of *H. Terryi*, n. sp.



Fig. 21.
Head and pronotum of the male holotype of *H. abyssinicus*,
n. sp.



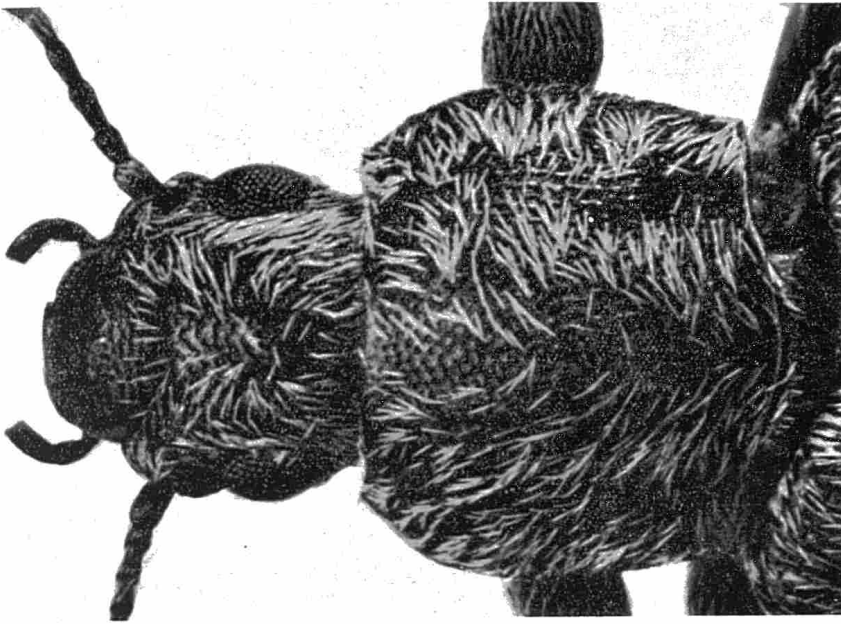


Fig. 24.
Head and pronotum of the male holotype of
H. cyphostethipes, n. sp.

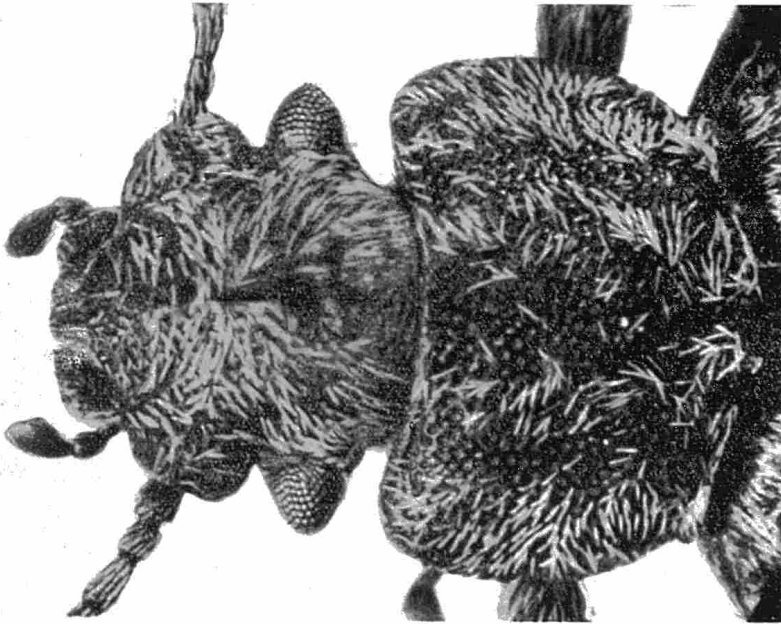


Fig. 23.
Head and pronotum of the male holotype of *H. Terryi conioops*,
n. ssp.





De uitgaven van het Museum van Belgisch Congo zijn te verkrijgen :
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Bij de Boekhandel Van Campenhout, Parochianenstraat, 22, Brussel.

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