

On the genus *Thyrecephalus* from Africa south of Sahara with description of four new species (Coleoptera: Staphylinidae: Xantholinini)

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Abstract. A modified description of the genus *Thyrecephalus* Guérin-Méneville, 1844 is presented. A lectotype is designated for *Xantholinus ferox* Harold, 1881 and this species is transferred to *Thyrecephalus*. The holotype of *Thyrecephalus semipiceus* Bernhauer, 1937 was studied and four new species of this genus, *T. giganteus* sp. nov. from Democratic Republic of Congo, *T. magnus* sp. nov. from west-Africa, *T. michaeli* sp. nov. from west and central-Africa and *T. paraferox* sp. nov. from Angola are described, illustrated and compared with similar species. *Eulissus methneri* Bernhauer, 1937 is placed in synonymy with *Thyrecephalus ferox* (Harold, 1881).

INTRODUCTION

The tribe Xantholinini is represented by many genera and large number of species in all zoogeographical regions. Within the last 40 years or so, the tribe has been revised at both generic and specific levels for the Palaearctic region (for example Coiffait 1972, Bordoni 1999, 2000, 2003a, 2003b), for America north of Mexico (Smetana 1982) and for the Oriental and Australian regions (Bordoni 2002, 2005a, 2005b). No revision on the generic level using modern taxonomic procedure exists for the Afrotropical, Madagascan and Neotropical regions, except for the impoverished fauna of the Mascarene and Comoro Islands (Lecoq 1990, 1996).

To date my studies have been concentrated on those species of Xantholinini in which the pronotum lacks dorsal rows of punctures.

Afrotropical species having such characters have been described in genera *Xantholinus* Dejean, 1821, *Eulissus* Mannerheim, 1830, *Thyrecephalus* Guérin-Méneville, 1844 and *Platydomus* Fauvel, 1905. I have had the opportunity to see types (holotypes or syntypes) of all these species, except for *Thyrecephalus ater* (Laporte, 1835), for which I follow the concept of classic authors based on specimens determined by them.

These species can be arranged in two different groups of genera, characteristic by the following characters:

Group 1: superior border of pronotal hypomera turning downwards well before middle, joining inferior line next to front margin of procoxae and continuing onto front margin of pronotum.

Group 2: superior border of pronotal hypomera not turning downwards until close to anterior angle and not joining inferior line.

The present study deals with group 1 only. Most of the species of this group belong unambiguously to the genus *Thyrecephalus*. The generic positions of some others remain dubious. Examination of the material available has identified the need for a new concept of the genus *Thyrecephalus* and has discovered four new species within the genus.

MATERIAL AND METHODS

The study presented here is based on specimens deposited in various museums and on the material collected recently by my colleagues. Aedeagi of dissected males were embedded in Euparal or Canada balsam (all HTs) or glued on paper cards using water-soluble glue (most of PTs). Measurements are indicated in millimeters. Body length was measured from the front of mandibles to the tip of abdomen; forebody length from the front of the clypeus to the apical margin of the pronotum; head length from the front of the clypeus to the front of the necks; head width across the widest part of the head including the eyes; length of the elytra from the base of the shoulder to the posterior angle measured parallel to the sutural line; width of the elytra across the widest part; length of the aedeagus from the base of median lobe to the apex of the paramere. Locality labels for the material examined are cited in the original version and marked with quotation marks („“).

The material examined is deposited in the following collections:

- DEI Deutsches Entomologisches Institut, Münchenberg, Germany (L. Zerche);
FMNH Field Museum of Natural History, Chicago, USA (A. Newton, M. Thayer);
HNHM Hungarian Natural History Museum, Budapest, Hungary (Gy. Szél, O. Merkl);
IRSNB Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium (K. Desender, M. Peeters);
JJRC J. Janák, private collection, Rtyň nad Bílinou, Czech Republic;
MFNB Museum für Naturkunde, Berlin, Germany (M. Uhlig);
MRAC Musée Royal de l'Afrique central, Tervuren, Belgium (M. De Meyer);
MSBC M. Schülke, private collection, Berlin, Germany;
NHMW Naturhistorisches Museum, Wien, Austria (H. Schillhammer);
TMSA Transvaal Museum, Pretoria, South Africa (R. Müller);
ZMH Zoological Museum, Helsinki, Finland (H. Silfverberg).

Abbreviations: n- number of specimens measured, L- length, W- width, M- arithmetic mean, R- ratio, HT- holotype, LT- lectotype, PT- paratype.

RESULTS

Thyrecephalus Guérin-Méneville, 1844

Genotype: *Thyrecephalus jekeli* Guérin-Méneville, 1844.

Descriptions of the genus based on detailed characters were published for North American and Central American species by Smetana (1982) and for Oriental species by Bordoni (2002) and are extended for Afrotropical species as follows.

Description. Form elongate, stout. Head variably punctate, punctures not forming semi-impressed rows of coalescent grooves, frontal grooves short or moderately long, ocular grooves inconspicuous or absent. Anterior margin of frons between antennal insertions extended into short and very wide, apically truncate process, limited at each side by rounded emargination, and slightly impressed dorsally. Eyes small, temporae longer than length of eyes seen from above, evenly rounded, hind angles rounded or acute. Antennae geniculate, moderately short, antennal insertions separated from each other by distance about equal to distance separating each insertion from anteromedian margin of eye, first segment long, thickened towards apex, equal in length to at least the four following segments combined, second segment shorter than third, distal segments more or less transverse. Labrum short, transverse, lobate or rounded apically, with long and strong apical setae. Mandibles stout, lateral furrow reduced to vague impression at base. Maxillary palpi moderately long, segment 3 shorter than segment 2, segment 4 longer and somewhat narrower than segment 3, subacute apically. Labial palpi moderately long, last segment distinctly longer than segment 2. Mentum short, transverse, pentagonal. Gula very short, gular sutures contiguous. Pronotum without dorsal rows of punctures; both superior and inferior lines of pronotal hypomera strongly developed, superior line turning downwards well before middle, joining inferior line next to front margin of procoxae and continuing onto front margin of pronotum. Prosternum elevated medioposteriorly, without median carina or with posteromedian carina, intercoxal process minute and short, triangular; epimera present. Mesosternum very short, transverse, widely separating middle coxae. Metasternum very long. Elytra overlapping at suture. Legs moderately long; protarsi simple (not dilated) in either sex, first four segments gradually becoming shorter, last segment about as long as three preceding segments combined; protibiae with numerous strong spines on outer margin; mesotibiae strongly spinose, with apical ctenidium which extends onto inner margin backwards to about middle and with another similar ctenidium above it; first segment of mesotarsus and metatarsus about as long as second, last segment about as long as preceding segments combined; metatibiae spinose on outer margin, with apical ctenidium which extends onto inner margin backwards to about middle, and with another similar ctenidium above it extending along outer margin to about middle. Tergite and sternite VIII of male simple, not modified. Tergite X of male rather narrowly exposed between sclerites of tergite IX, strongly narrowed proximally, sclerites of tergite IX contiguous mediobasally. Sternite IX of male asymmetrical, located centrally. Aedeagus with symmetrical parameres.

Differential diagnosis. This genus differs from several other genera of Xantholinini by the absence of dorsal rows of punctures on the pronotum (together with *Agerodes* Motschulsky, 1858, *Daolus* Bordoni, 2004, *Dibothroglyptus* Scheerpeltz, 1957, *Domea* Bordoni, 2002, *Eachamia* Bordoni, 2005, *Eulissus* Mannerheim, 1830, *Gauropterus* Thomson, 1860, *Liotesba* Scheerpeltz, 1965, *Oculolabrus* Steel, 1946, *Ulisseus* Bordoni, 2002), by the punctures on the head not forming semi-impressed rows of coalescent grooves (in contrast to *Gauropterus*), by the absence of longitudinal furrows on the dorsal side of the temporae (in contrast to *Ulisseus*), by the anterior angles of pronotum not emarginated (in contrast to *Dibothroglyptus*), by both the superior and the inferior lines of pronotal hypomera being

strongly developed, the superior line turning downwards well before middle and joining the inferior line next to the front margin of procoxae and continuing onto the front margin of pronotum (in contrast to *Agerodes*, *Daolus*, *Domea*, *Eachamia*, *Eulissus*, *Liotosba* and *Oculolabrus*, which also have both the superior and the inferior line of pronotal hypomera strongly developed, but which have the superior line of pronotal hypomera not turning downwards until close to anterior angle and not joining the inferior line).

Discussion. In all the Afrotropical species the posteromedian carina of the prosternum is absent, in contrast to a group of North American and Mexican species described in *Saurohypnus* Sharp, 1885, which were synonymised with *Thyrecephalus* by Smetana (1982). Further detailed study of this group and its relation to other Nearctic and Neotropical species is needed in order to check its generic position once more and either to confirm Smetana's conclusion or to take out *Saurohypnus* from synonymy with *Thyrecephalus* and to revalidate it.

***Thyrecephalus giganteus* sp. nov.**

(Figs 1, 6, 11-14)

Type material. Holotype (♂): Democratic Republic of Congo: „Congo Belge, P. N. G., Miss. H. De Saeger, II/gd/17, 10-IV-1951, Réc. H. De Saeger, 1557“, (MRAC). Paratypes: (2 ♂♂, 2 ♀♀): with the same data as holotype, (MRAC, JJRC).

Description (n = 5). Body length 32.0-35.0 mm (M = 33.5 mm, HT = 34.0 mm), forebody length 20.0-23.0 mm (M = 21.3 mm, HT = 21.0 mm). Body elongate, moderately slender. Dark brown, elytra and abdomen red or reddish-brown, antennae brown with apical half of segment 11 reddish-brown.

Head (Fig. 6) rounded oblong, slightly convex, disc flattened, slightly longer than wide (R = 1.09-1.14, M = 1.11, HT = 1.14), with parallel sides. Maximum width situated in posterior third. Eyes moderately large, from head outline slightly prominent, temporae distinctly longer than length of eyes seen above (R = 2.13-2.50, M = 2.30, HT = 2.23). Posterior angles less distinct, rounded. Punctuation of head moderately fine and dense, concentrated mainly at posterior inner margin of eye between ocular puncture (bearing long seta) and posterior angles, punctures rounded, temples laterally (best seen in lateral view) moderately coarsely and very densely punctured, some punctures coalescent, diameter of punctures more than twice the width of posterior eye facets. Ocular puncture situated far from inner margin of eye, distance separating ocular punctures from each other about 2.8 times larger than distance separating each ocular puncture from inner margin of eye. Surface shining, without microsculpture, but with scattered, extremely fine punctures. Frontal grooves „V“ shaped, external groove terminating in ocular puncture. Ocular grooves very short and shallow, running from inner margin of eye to ocular puncture, but ending inconspicuously not far from inner margin of eye. Postorbital puncture bearing seta absent. Labrum with six lobes, maxillary palpi 3-segmented, labial palpi 3-segmented, both glabrous, except for terminal setae. Antennae short and stout, first segment long, distinctly bent, a little longer than segments 2-6 combined;



Figs 1-5. Habitus: 1- *T. giganteus* sp. nov., HT; 2- *T. magnus* sp. nov., HT; 3- *T. michaeli* sp. nov., HT; 4- *T. semipiceus* Bernhauer, 1937, Tanzania; 5- *T. paraferox* sp. nov., HT.



Figs 6-10. Head: 6- *T. giganteus* sp. nov., HT; 7- *T. magnus* sp. nov., HT; 8- *T. michaeli* sp. nov., HT; 9- *T. semipiceus* Bernhauer, 1937, Tanzania; 10- *T. paraferox* sp. nov., HT, p- postocular seta.



second segment subconical, inner margin moderately concave, about 1.5 longer than wide; third segment long, distinctly longer and slightly wider than second segment, longer than segments 4 and 5 combined; distal segments transverse; fifth segment moderately transverse (R = 0.82-0.86, M = 0.84, HT = 0.85); tenth segment strongly transverse (R = 0.68-0.75, M = 0.73, HT = 0.74); last segment suboval, about 1.3 longer than wide.

Pronotum rounded trapezoidal, moderately convex, more than a quarter longer than wide (R = 1.26-1.31, M = 1.27, HT = 1.27), a little shorter and distinctly narrower than head (length of pronotum/length of head 0.88-0.94, M = 0.91, HT = 0.90; width of pronotum/width of head 0.77-0.81, M = 0.79, HT = 0.80), anterior margin rounded, towards anterior angles nearly straight, anterior angles rounded; slightly narrowed posteriorly, lateral margins feebly concave behind the middle, posterior angles distinct, narrowly rounded. Lateral margins with lateral rows of punctures bearing long or moderately short setae. Anterior angles with rounded impression without seta and with three punctures bearing long setae. Pronotum without median line. Surface shining, without microsculpture, but with scattered, extremely fine punctures. Prosternum in the middle slightly elevated longitudinally, with narrowly triangular intercoxal process. Scutellum triangular, sparsely punctured, surface with dense microsculpture of transverse waves.

Elytra trapezoidal, about as long as wide (R = 0.97-1.07, M = 1.02, HT = 1.04), flat, with prominent humerae, sides slightly widened posteriorly; punctation sparse and moderately fine, base and lateral margins with punctures bearing long setae. Surface between punctures with scattered, extremely fine punctures.

Abdomen moderately narrowed posteriorly, with seventh tergite bearing very fine whitish palisade fringe; punctation sparse and very fine, most punctures bearing moderately long setae, some of them bearing very long semierect setae. Surface between punctures with scattered, extremely fine punctures.

Legs moderately long and narrow. Meso- and metatibia with apical ctenidium and with subapical ctenidium above it.

Male. Sternite VIII as long as tergite VIII, broadly rounded apically. Sternite IX (Fig. 13) asymmetrical, apical portion weakly sclerotized and furnished with a thick brush of fine hairs. Tergite X (Fig. 14) elongate, apical margin rounded and bearing several moderately long bristles. Aedeagus (n = 3) 3.07-3.12 mm long (M = 3.09 mm, HT = 3.07 mm), elongate, median lobe with moderately narrow process proximally, parameres long and slender (Figs 11, 12). Internal sac moderately long and very narrow, covered with very weakly sclerotized fine scales.

Differential diagnosis. *T. giganteus* sp. nov. is the largest hitherto known species of afrotropical *Thyreocephalus*. From most other afrotropical species it differs through its brownish body with red or reddish-brown elytra and abdomen. From all the known species except for *T. magnus* sp. nov. it is distinctly different by virtue of the form of the aedeagus. From the similarly coloured, new species described below - *T. magnus* sp. nov. it is distinctly different by virtue of the absence of postorbital setae. In addition it can be distinguished from *T. magnus* sp. nov. by the following characters: head less convex with flattened disc, ocular grooves distinctly shallower, tempora laterally moderately coarsely and very densely punctured, some punctures coalescent, diameter of punctures more than twice the width of posterior eye facet (punctation of tempora in *T. magnus* sp. nov. is sparse and fine, the

diameters of the punctures are about as wide as the diameters of the posterior eye facets, the punctures are distinctly separated, the interstices are larger than diameters of the punctures). The aedeagus is similar to *T. magnus* sp. nov., but the distal part of median lobe is wider than in *T. magnus* sp. nov.

Bionomics. The type series was taken in decayed organic matter in gallery forest. The abbreviation „II/gd/17“ on locality label indicates: „galerie forestière sèche“, „Matières organiques en décomposition“ (Saeger 1956: 176).

Distribution. The new species is known only from the „Parc National Garamba“ in the Democratic Republic of Congo.

Etymology. The species is named after its extremely large body relative to other Xantholinini.

Thyrecephalus magnus sp. nov.

(Figs 2, 7, 15-18)

Type material. Holotype (♂): Guinea: „W. AFRICA, Guinea Coyah 15.iii-15.iv.1969, leg. K. Ferencz“ (HNHM). Paratypes: Benin: (1 ♂): „Benin Village Akongbere near Save, 19.iv.-26.iv.2000, A. Kudrna Jr. lgt.“, (JJRC); (1 ♂): „Benin Bembereke, 2 km W of Gando, 02-03.vii.2001, A. Kudrna Jr. lgt.“, (JJRC); Burkina Faso: (1 ♀): „Ober Volta Bobo Dioulasso“, „x.1983, leg. H. Politzar“, (NHMW); (5 ♂♂, 2 ♀♀) „Coll. Mus. Tervuren, Haute-Volta: Bobo-Dioulasso, 11.12N.-4.18W ex Coll R Frieser“, (MRAC, JJRC); Cameroun: (1 ♀): „Joko Kolin“, „Zool. Mus. Berlin“, (MFNB); Central African Republic: (1 ♂, 1 ♀): „COLL. MUS. TERVUREN, Rép. Centrafricaine: Bambari, iii.1964, G. Pierrard“, (MRAC); Guinea: (2 ♂♂, 2 ♀♀): same data as holotype, (HNHM, JJRC); (1 ♂) „♀“ [sic!] „Région Kindia Mt. Gangan 750 m 3.5.51“, „Exped. Mus. G. Frey Franz. Guinea 1951 M. Afr. leg. Bechyne“, „ex coll. Scheerpeltz“, „Typus Thyrecephalus freyi O. Scheerpeltz“, „Freyi Scheerp.“, (NHMW); (1 ♀): „Région Kindia Mt. Gangan 500 m 6.5.51“, „Exped. Mus. G. Frey Franz. Guinea 1951 W. Afr. leg. Bechyne“, „ex coll. Scheerpeltz“, „cotypus Thyrecephalus Freyi O. Scheerpeltz“, (NHMW); (1 ♂): „Guinea Coyah“, „iv.1967 leg. K. Ferencz“, (HNHM); Nigeria: (1 ♂): „Nigeria Afr. Kaduna 1971 10.-17.v. Politzar leg.“, (JJRC); (2 ♀♀): „Coll. Mus. Tervuren, Nigeria Kaduna, IX-1971, R. Frieser ded.“, (MRAC); Tchad: (1 ♂): „Coll. Mus. Tervuren, Tchad: Mondou, Bebedjia, 21.i.1978, G. Ruella“, (MRAC).

Description (n = 14). Body length 23.4-34.7 mm (M = 27.3 mm, HT = 29.5 mm), forebody length 14.5-19.5 mm (M = 16.5 mm, HT = 18.7 mm). Body elongate, moderately slender. Dark reddish-brown or brown, elytra and abdomen red, antennae brownish with apical half of antennal segment 11 reddish-brown.

Head (Fig. 7) rounded oblong, slightly convex, disc flattened, slightly longer than wide (R = 1.02-1.12, M = 1.05, HT = 1.04), very slightly dilated and arcuated posteriorly. Maximum width situated in posterior third. Eyes moderately large, not prominent from head outline,

temporae distinctly longer than length of eyes seen above ($R = 1.77-2.78$, $M = 2.03$, $HT = 2.10$). Posterior angles less distinct, rounded. Punctuation of head fine and dense, concentrated mainly at posterior inner margin of eye between ocular puncture (bearing long seta) and posterior angles, punctures rounded, temples laterally moderately finely and sparsely punctured (best seen in lateral view), punctures not coalescent, interstices larger than diameter of puncture. Ocular puncture situated far from inner margin of eye, distance separating ocular punctures from each other about 2.4 times larger than distance separating each ocular puncture from inner margin of eye. Surface shining, without microsculpture, but with scattered, extremely fine punctures. Frontal grooves „V“ shaped, external groove terminating in ocular puncture. Ocular grooves short and shallow, leading from inner margin of eye to ocular puncture, but ending in the middle between the puncture and inner margin of eye. One postorbital puncture bearing seta present. Labrum with six lobes, maxillary palpi 3 segmented, labial palpi 3 segmented, both glabrous, except for terminal setae. Antennae short and stout, first segment long, distinctly bent, a little longer than segments 2-5 combined; second segment subconical, inner margin moderately concave, about 1.5x longer than wide; third segment long, distinctly longer and slightly wider than second segment, a little shorter than segments 4 and 5 combined; distal segments transverse; fifth segment moderately transverse ($L/W = 0.64-0.78$, $M = 0.71$, $HT = 0.74$); tenth segment strongly transverse ($L/W = 0.59-0.71$, $M = 0.63$, $HT = 0.61$); last segment suboval, about 1.3 longer than wide.

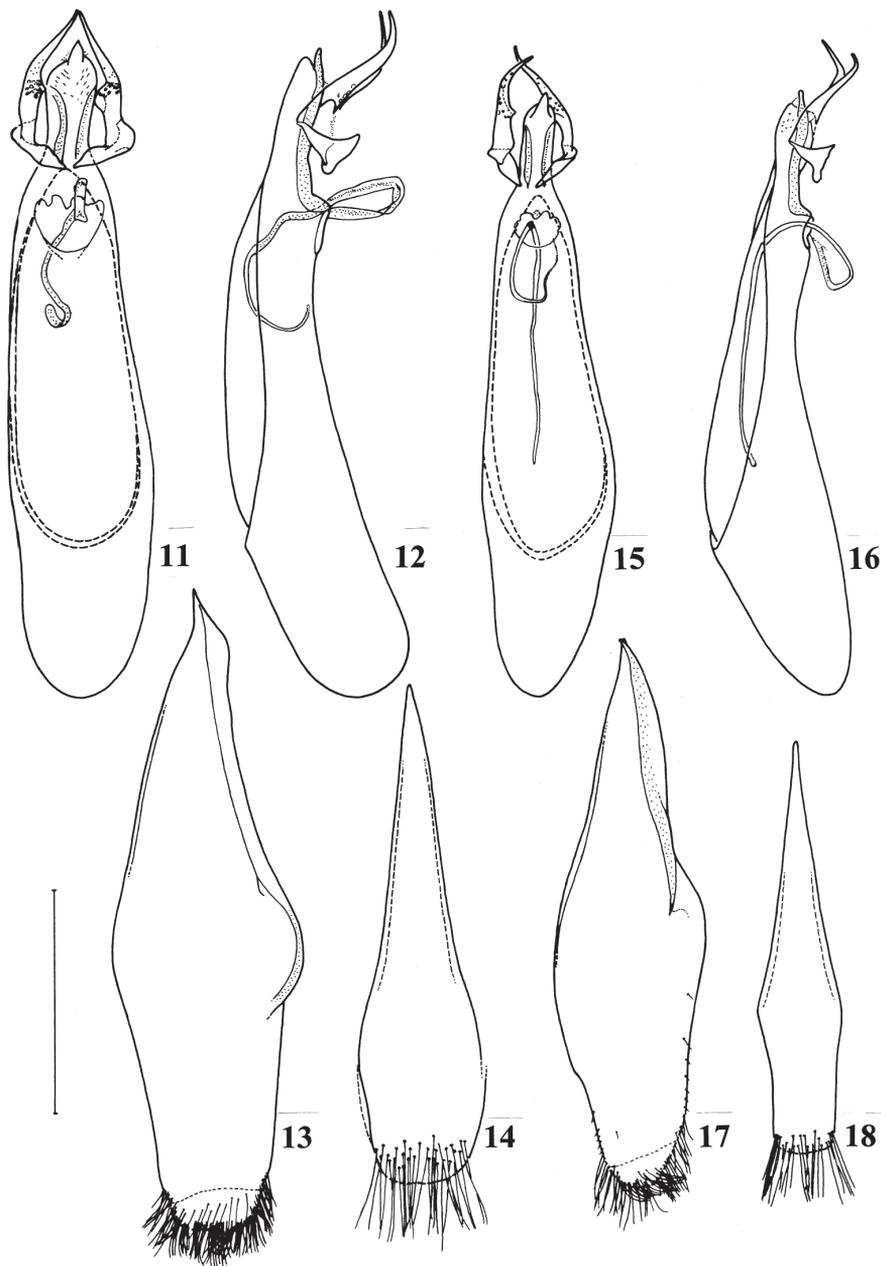
Pronotum rounded trapezoidal, moderately convex, more than a quarter longer than wide ($R = 1.23-1.34$, $M = 1.28$, $HT = 1.28$), a little shorter or as wide as head and distinctly narrower than head (length of pronotum/length of head $0.91-1.01$, $M = 0.97$, $HT = 0.94$; width of pronotum/width of head $0.76-0.83$, $M = 0.79$, $HT = 0.76$), anterior margin rounded, towards anterior angles nearly straight, anterior angles well marked; slightly narrowed posteriorly, lateral margins feebly concave behind the middle, posterior angles distinct, narrowly rounded. Lateral margins with lateral rows of punctures bearing long or moderately short setae. Anterior angles with rounded impression without setae and with three punctures bearing long setae. Pronotum with very short median line basally. Surface shining, without microsculpture, but with scattered, extremely fine punctures. Prosteronum in the middle slightly elevated longitudinally, with narrowly triangular intercoxal process. Scutellum triangular, sparsely punctured, surface with dense microsculpture of transverse waves.

Elytra trapezoidal, a little longer than wide ($R = 1.02-1.15$, $M = 1.09$, $HT = 1.09$), flat, with prominent humeri, sides slightly widened posteriorly; punctuation sparse and moderately fine, base and lateral margins with punctures bearing long setae. Surface between punctures with scattered, extremely fine punctures.

Abdomen moderately narrowed posteriorly, with seventh tergite bearing very fine whitish palisade fringe; punctuation sparse and very fine, most punctures bearing moderately long setae, some of them bearing very long semierect setae. Surface between punctures with scattered, extremely fine punctures.

Legs moderately long and narrow. Meso- and metatibia with apical ctenidium and with subapical ctenidium above it.

Male. Sternite VIII as long as tergite VIII, broadly rounded apically. Sternite IX (Fig. 17) asymmetrical, apical portion weakly sclerotized and furnished with a thick brush of fine hairs. Tergite X (Fig. 18) elongate, apical margin rounded and bearing several moderately



Figs 11-18. *T. giganteus* sp. nov., HT, 11- aedeagus, ventral view, 12- aedeagus, lateral view, 13- sternite IX, 14- tergite X; *T. magnus* sp. nov., HT, 15- aedeagus, ventral view, 16- aedeagus, lateral view, 17- sternite IX, 18- tergite X. Scale = 1 mm.

long bristles. Aedeagus (n = 4) 2.63-2.89 mm long (M = 2.74 mm, HT = 2.89 mm), elongate, median lobe with very narrow process proximally, parameres long and slender (Figs 15, 16). Internal sac moderately long and very narrow, covered with very weakly sclerotized fine scales.

Differential diagnosis. *T. magnus* sp. nov. is very large afrotropical species of *Thyrecephalus*. From most other afrotropical species it differs through its brown body with red or reddish-brown elytra and abdomen. From all known species except for *T. giganteus* sp. nov. it is distinctly different by virtue of the form of aedeagus. From the similarly coloured, but larger, species *T. giganteus* sp. nov., described above, it is different by the presence of postorbital punctures bearing long setae. It can also be distinguished by the following characters: punctuation of tempora sparse and fine, width of punctures about as wide as the width of posterior eye facets, punctures distinctly separated (not coalescent), interstices larger than diameters of punctures.

Bionomics. Nothing is known about the habitats of this species.

Distribution. The new species is known from west and central Africa (Benin, Burkina Faso, Cameroun, Central African Republic, Guinea, Nigeria, Tchad).

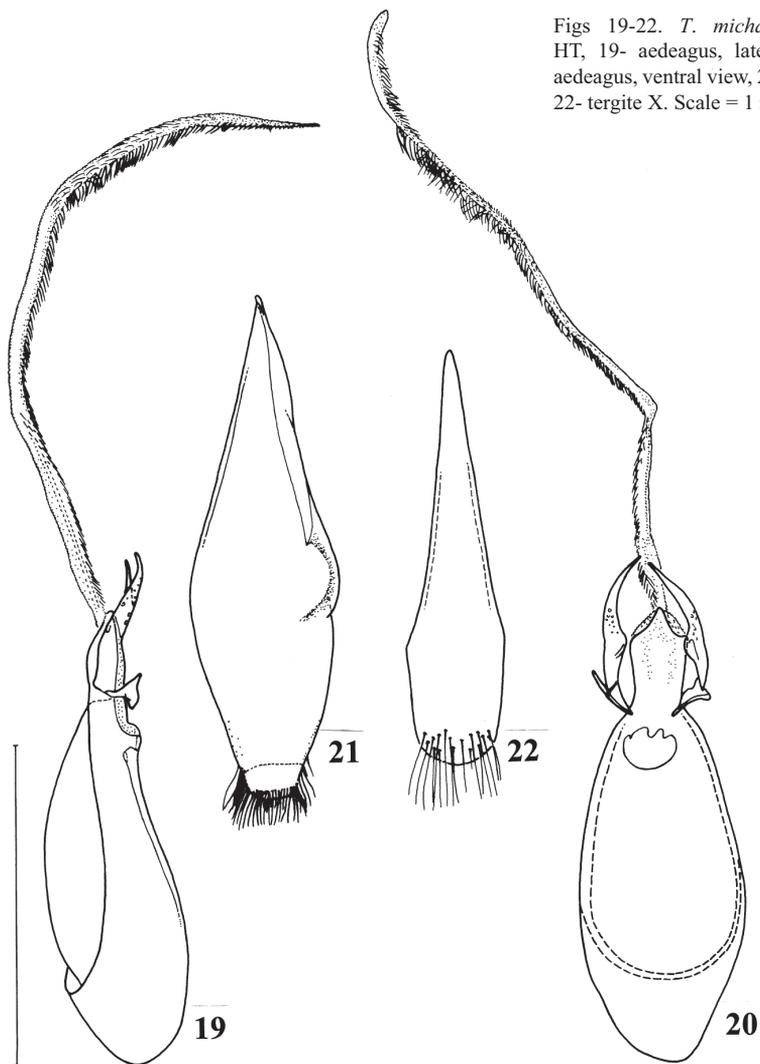
Etymology. The species is named after its very large body.

Thyrecephalus michaeli sp. nov.

(Figs 3, 8, 19-22)

Type material. Holotype (♂): Ivory Coast: „à la lampe U. V.“ „COLL. MUS. TERVUREN, Côte d'Ivoire: Bingerville, 18.iii.1962, J. Decelle“, (MRAC). Paratypes: Cameroun: (1 ♂): „Kamerun, Joko“, (MFNB); (1 ♀): „Joko, Kamerun“, (HNHM); Central African Republic: (1 ♂): „Centr. Afr. Rep., La Maboke, 6-9.vi.1973, R. Linnavuori“, (ZMH); Democratic Republic of Congo: (1 ♂): „MUSÉE DU CONGO, Haut-Uele: Yebo Moto, III-1926, L. Burgeon“, (MRAC); (1 specimen, sex indet.): „COLL. MUS. CONGO, Bunia, 1938, RR. FF. Maristes“, (MRAC); (1 ♂): „MUSÉE DU CONGO, Haut-Uelé: Moto, 1923, L. Burgeon“, (MRAC); Ghana: (1 ♂): „Bechem Ghana lg. Werner 3.86“, (MSBC); (3 ♂♂): „Ghana Kumasi 3/86 lg. Werner“, (MSBC , JJRC); (1 ♂): „Ghana: Ashanti Reg., Kumasi: Nhiasu, 6.43 N - 1.36 W, 22.xi.1967: no: 286, leg. Endrödy-Younga“, (TMSA); Guinea: (2 ♀♀): „Rep. Guinea Sérédoux lux 7.-8.iv.1975 leg. Zott“, (MFNB); (1 ♀): „Guinea Seredou 16.iv.1975 lux leg. Zott“, (JJRC); Ivory Coast: (1 ♂): „COLL. MUS. TERVUREN, Côte d'Ivoire: Bingerville, 1/15-xi-1962, J. Decelle“, (MRAC); (3 ♀♀): „COLL. MUS. TERVUREN, Côte d'Ivoire: Bingerville, 1-1962, J. Decelle“, „à la lampe U.V“, (MRAC, JJRC); Nigeria: (1 ♂): „Nigeria“, „Afr. Ore 27.xii.1970, Politzar leg.“ (JJRC).

Description (n = 13). Body length 13.0-18.5 mm (M = 14.7 mm, HT = 18.5 mm), forebody length 8.1-10.2 mm (M = 9.2 mm, HT = 9.5 mm). Body elongate, slender. Reddish brown,



Figs 19-22. *T. michaeli* sp. nov., HT, 19- aedeagus, lateral view, 20- aedeagus, ventral view, 21- sternite IX, 22- tergite X. Scale = 1 mm.

elytra light orange brown, tibiae, mandibles and antennal segments dark reddish-brown to brown, apical parts of two first antennal segments and apical part of last segment paler reddish-brown.

Head (Fig. 8) rounded oblong, slightly convex, a little longer than wide ($R = 1.04-1.10$, $M = 1.07$, $HT = 1.07$), very slightly dilated posteriorly, sides very slightly arcuate. Maximum width situated in posterior quarter. Eyes moderately large, not prominent from head outline, temporae distinctly longer than length of eyes seen from above ($1.45-2.13$, $M = 1.87$, $HT = 1.45$). Posterior angles less distinct, rounded. Punctuation of head moderately coarse and

dense, concentrated mainly at posterior inner margin of eye between ocular puncture (bearing long seta) and posterior angles, punctures oblong, temples laterally moderately coarsely and moderately densely punctured (best seen in lateral view), interstices mostly as wide as diameter of punctures or a little smaller. Ocular puncture situated far from inner margin of eye, distance separating ocular punctures from each other about 2.4 times larger than distance separating each ocular puncture from inner margin of eye. Surface shining, without microsculpture, but with scattered, extremely fine punctures. Frontal grooves „V“ shaped, external groove leading to ocular puncture, but ending before it. Ocular grooves very short and weakly impressed, leading from inner margin of eye to ocular puncture, but ending in the middle between ocular puncture and inner margin of eye. One postorbital puncture bearing seta present. Labrum with six lobes, maxillary palpi 3 segmented, labial palpi 3 segmented, both glabrous, except for terminal setae. Antennae short and stout, first segment long, distinctly bent, a little longer than segments 2-5 combined; second segment subconical, inner margin moderately concave, about 1.5 longer than wide; third segment long, distinctly longer and slightly wider than second segment, shorter than segments 4 and 5 combined; distal segments transverse; fifth segment moderately transverse ($L/W = 0.65-0.79$, $M = 0.73$, $HT = 0.79$); tenth segment strongly transverse ($L/W = 0.59-0.72$, $M = 0.66$, $HT = 0.67$); last segment suboval, about 1.3 longer than wide.

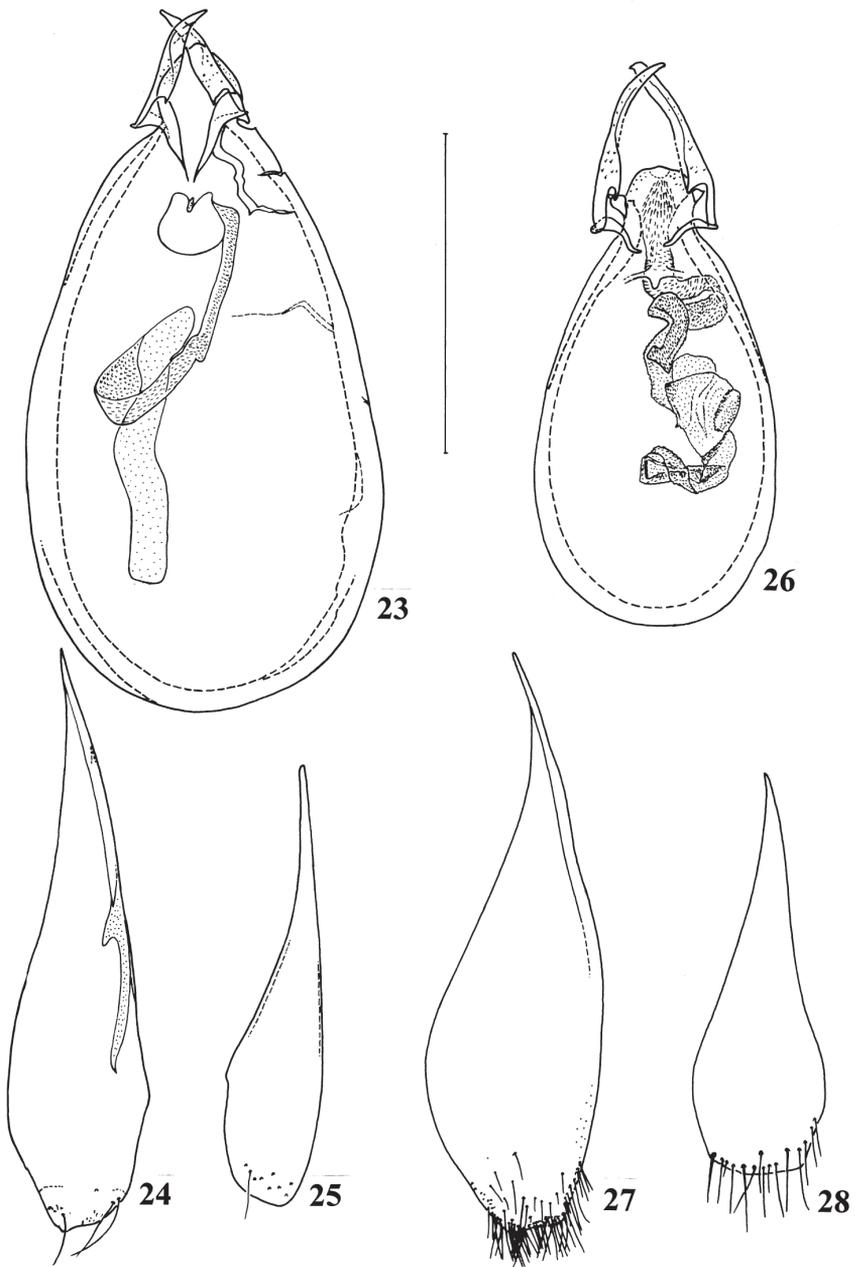
Pronotum rounded trapezoidal, moderately convex, more than a quarter longer than wide ($R = 1.25-1.32$, $M = 1.29$, $HT = 1.32$), about as long as head and distinctly narrower than it (length of pronotum/length of head $0.99-1.05$, $M = 1.02$, $HT = 1.02$; width of pronotum/width of head $0.81-0.90$, $M = 0.85$, $HT = 0.83$), anterior margin rounded, towards anterior angles nearly straight, anterior angles rounded; slightly narrowed posteriorly, lateral margins feebly concave behind the middle, posterior angles distinct, narrowly rounded. Lateral margins with lateral rows of punctures bearing long or moderately short setae. Anterior angles with rounded impression without seta and with two punctures bearing long setae. Pronotum without median line. Surface shining, without microsculpture, but with scattered, extremely fine punctures. Prosternum slightly longitudinally elevated medially with narrowly triangular intercoxal process. Scutellum triangular, sparsely punctured, surface with dense microsculpture of transverse waves.

Elytra trapezoidal, a little longer than wide ($R = 1.06-1.15$, $M = 1.09$, $HT = 1.09$), flat, with distinctly prominent humerae, sides slightly widened posteriorly; punctation moderately dense and moderately fine, base and lateral margins with punctures bearing long setae. Surface between punctures with scattered, extremely fine punctures.

Abdomen moderately narrowed posteriorly, with seventh tergite bearing very fine whitish palisade fringe; punctation sparse and very fine, most punctures bearing moderately long setae, some of them bearing very long semierect setae. Surface between punctures with fine microsculpture of transverse waves.

Legs moderately long and narrow. Meso- and metatibia with apical ctenidium and with subapical ctenidium above it.

Male. Sternite VIII as long as tergite VIII, broadly rounded apically. Sternite IX (Fig. 21) asymmetrical, apical portion weakly sclerotized and furnished with a brush of fine hairs. Tergite X (Fig. 22) elongate, apical margin rounded and bearing several moderately long bristles. Aedeagus ($n = 6$) 1.46-1.96 mm long ($M = 1.62$ mm, $HT = 1.61$ mm), elongate,



Figs 23-28. *T. paraferox* sp. nov., HT, 23- aedeagus, ventral view, 24- sternite IX, 25- tergite X; *T. ferox* (Harold), 26- aedeagus, ventral view, 27- sternite IX, 28- tergite X. Scale = 1 mm.

median lobe with wide process proximally, parameres long and slender (Figs 19, 20). Internal sac moderately long and narrow, covered with fine hairs.

Differential diagnosis. *T. michaeli* sp. nov. differs from most other afrotropical species of *Thyrecephalus* through its reddish brown body with light orange elytra. The new species differs from the only similarly coloured species, *T. semipiceus* Bernhauer, 1937, by having one postorbital puncture (*T. semipiceus* has 2 or exceptionally 3 postorbital punctures) and by the fine dense, oblong punctures on the head, which has smaller eyes and is narrower.

Etymology. The species is named after Michael Schülke, expert in the subfamily Tachyporinae, who kindly loaned me the material, in which I first recognized this species.

Distribution. The new species is known from west and central Africa (D.R. Congo, Ivory Coast, Cameroun, Central African Republic, Ghana, Guinea, Nigeria).

Bionomics. Nothing is known about the habitats of this species.

Thyrecephalus semipiceus Bernhauer, 1937

(Figs 4, 9)

Type material. Holotype (♀): Tanzania: „D. O. Africa, Daressalam, leg. Methner“, „semipiceus, Brh. Typ. un“, „semipiceus, Brnh. Typus, unic. Thyreceph.“, „Chicago NHMus, M. Bernhauer, Collection“ (FMNH).

Additional material examined. Cameroun: (1 ♀): „Joko, Kamerun“, (HNHM); Kenya: (1 ♂): „Kenya: Mtito Andej 900 m Tsavo Park I.1990 leg. Werner“, „coll. Zerche“, (DEI); (3 ♀♀): „Kenya: Mtito Andej Tsavo Park I.1990 leg. Werner“, „coll. Zerche“, (DEI, JJRC); Tanzania: (1 ♂, 1 ♀): „Tanzania: Same Parc Mts. Kilimanjaro Prov. 1000 m I.1990 leg. Werner“, „coll. Zerche“, (DEI, JJRC); (1 ♂): „Tanzania NE, Handeni, Makinda env., 14.iii.2002, M. Snížek lgt., (JJRC); South Africa: (1 ♂): „LisbonCitrusEstate, Clanor, Transvaal, 2431CD, 27.xi.1981, R. Toms“, (TMSA); (1 ♀): „S. Afr: Kruger Nat. Pk, Skukuza res. camp, 25.00 S - 31.35 E, 19.2.1995: E-Y: 3102, UV light & trap, leg. Endrödy-Younga“, (TMSA); Zambia: (1 ♂): „NW Zambia, North Western Pr., 40 km SW Kabompo, 15.-16.xii.2007, 1100 m, A. Kudrna Jr. lgt., (JJRC).

Distribution. The new species is known from Cameroun, Kenya, Tanzania, South Africa and Zambia.

Bionomics. Nothing is known about the habitats of this species.

Thyrecephalus paraferox sp. nov.

(Figs 5, 10, 23-25, 29-31)

Type material. Holotype (♂): Angola: „Kvg“, „Angola, Mission sc. Suisse 1932-1933“, „Emmerich Reitter vend. VIII. 1939“, „ex coll. Scheerpeltz“, (NHMW). Paratypes: (1 ♂): „Angola: Chingufo, 25.XI.1972“, „along path“, „Coll. D. H. Kistner & R. J. Swift, No. 142

2640“, (FMNH); (1 ♀): „H“, „Angola“, „ferox Har. var.“, „R.I.Sc.N.B. 17 479“, „Coll. et det. A. Fauvel“, (IRSNB).

Description (n = 3). Body length 18.2-19.0 mm (HT = 19.0 mm, PT = 19.0 mm, 18.2 mm), forebody length 10.0-10.5 mm (HT = 10.0 mm, PT = 10.4, 10.5 mm). Body narrow, slender, parallel. Dark black, elytra and abdomen pitchy black, legs and antennae brownish-black, palpi, anterior margin of frons, narrow posterior margins of abdominal segments a tip of abdomen beginning apical third of segment 7 reddish-brown.

Head (Fig. 10) rounded trapezoidal, distinctly convex, a little longer than wide (HT = 1.14, PT = 1.08; 1.12), very slightly dilated posteriorly, sides slightly arcuate. Maximum width situated in posterior third. Eyes small, flat, not prominent from head outline, temporae much longer than length of eyes seen above (R HT = 3.04, PT = 2.96; 3.03). Posterior angles distinct, obtuse, with small dent, in lateral view with moderately deep line formed the dent seen above. Punctuation of head irregular, punctures at posterior inner margin of eye and on vertex very fine and sparse, interstices 3-5x larger than diameter of puncture, dorsal part of tempori with group of coarse punctures forming narrow triangular area beginning behind eyes, narrowed behind and finished in line with posterior angles. Punctures in the area irregular, average distance between punctures slightly smaller than diameters of punctures, as large as the diameters of puncture or up to twice larger. Surface between larger punctures with some scattered markedly finer punctures. Dorsal side of tempori smooth, without punctuation. Ocular puncture situated close to inner margin of eye, distance separating ocular punctures from each other about 7 times larger than distance separating each ocular puncture from inner margin of eye. Surface shining, without microsculpture, but with scattered, extremely fine punctures. Frontal grooves „V“ shaped, external groove terminating in ocular puncture. Ocular grooves very short and shallow, leading from inner margin of eye to ocular puncture, but ending in the middle between eye and ocular puncture. Two postorbital punctures bearing seta present. Labrum with six lobes, maxillary palpi 3 segmented, labial palpi 3 segmented, both glabrous, except for terminal setae. Antennae short and stout, first segment long and moderately broad, a little longer than segments 2-5 combined; second segment subconical, inner margin moderately concave, about as long as wide; third segment long, distinctly longer and slightly wider than second segment, a little shorter than segments 4 and 5 combined; distal segments transverse; fifth segment moderately transverse (R = 0.52-0.54); tenth segment strongly transverse (R = 0.46-0.49); last segment suboval, about as long as wide.

Pronotum rounded trapezoidal, moderately convex, less than a quarter longer than wide (R HT = 1.22, PT = 1.20, 1.22), slightly longer and narrower than head (length of pronotum/length of head HT = 1.05, PT = 1.06, 1.08; width of pronotum/width of head HT = 0.98, HT = 0.96, 0.99), anterior margin truncate, towards anterior angles slightly concave, anterior angles angular; sides distinctly narrowed posteriorly, lateral margins distinctly concave in the middle, posterior angles largely rounded. Lateral margins with rows of punctures bearing setae of long or intermediate length. Anterior angles with rounded impression without seta and a few punctures between anterior angles and anterior margin. Pronotum with very short and shallow median line. Surface shining, without microsculpture, but with sparse, extremely fine punctures. Prosternum slightly longitudinally elevated medially with narrowly

triangular intercoxal process. Scutellum triangular, sparsely punctured, surface with dense microsculpture of transverse waves.

Elytra trapezoidal, slightly longer than wide (R HT = 1.13, PT = 1.03, 1.11), slightly convex, humerae distinctly prominent, sides slightly widened posteriorly; punctation sparse and coarse, most punctures situated in sutural, dorsal and lateral rows, some punctures also at base. Punctures bearing short, oblique setae. Surface between punctures wrinkled, with scattered, extremely fine punctures.

Abdomen subparallel, very slightly widened towards sixth segment, then slightly narrowed to the tip; seventh tergite bearing very fine whitish palisade fringe; punctation sparse and very fine, most punctures bearing moderately long setae, some of them bearing long semierect setae. Surface between punctures with very fine microsculpture of transverse waves, reduced in places.

Legs moderately long and narrow. Meso- and metatibia with apical ctenidium and with subapical ctenidium above it.

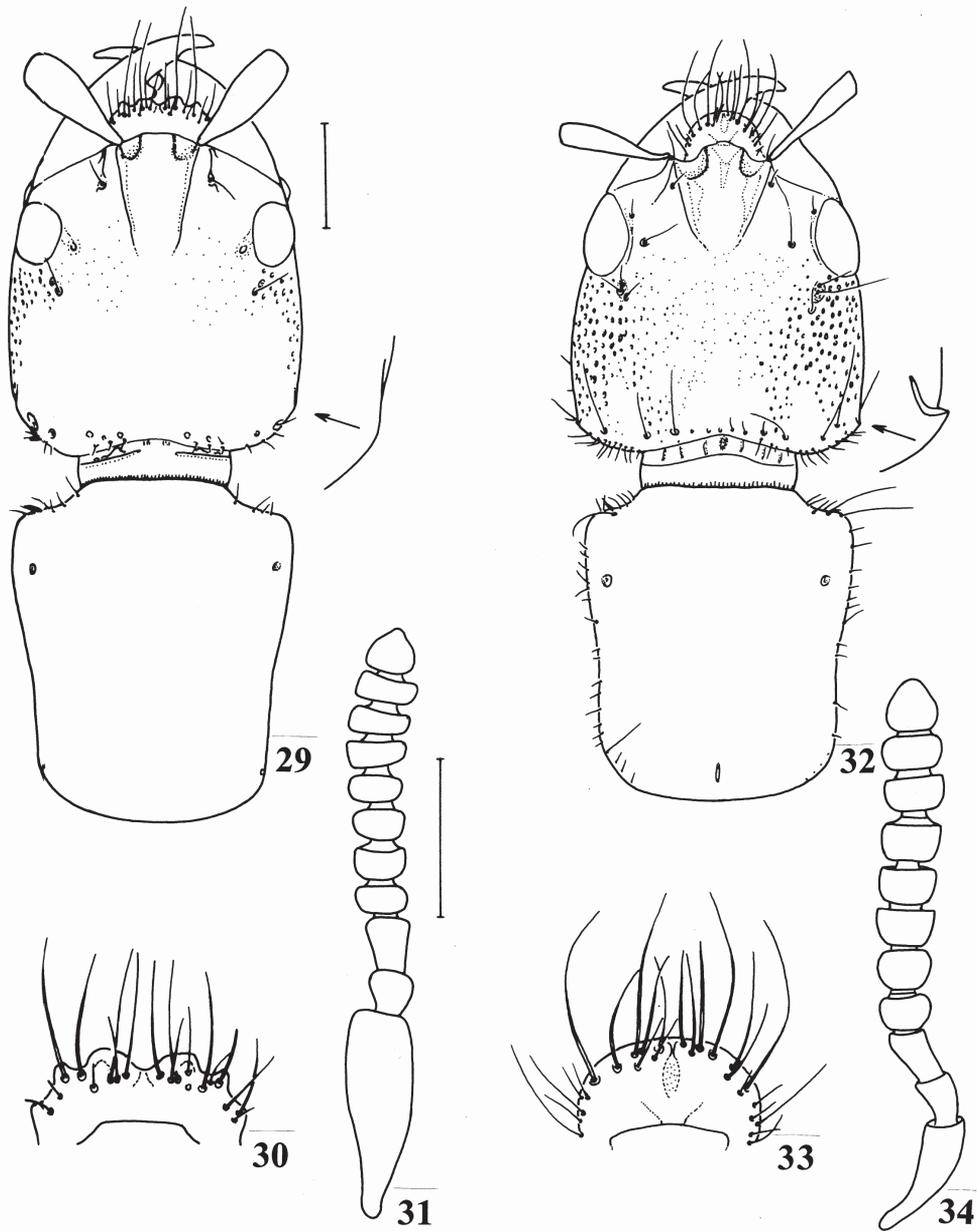
Male. Sternite VIII as long as tergite VIII, broadly rounded apically. Sternite IX (Fig. 24) asymmetrical, apical portion weakly sclerotized and furnished with a thick brush of fine hairs (in HT most of the hairs missing). Tergite X (Fig. 25) elongate, apical margin rounded and bearing several moderately long bristles (in HT most of them missing). Aedeagus 3.28 mm (PT) and 3.40 mm (HT) long, suboval, median lobe with wide process proximally, parameres moderately long and slender (Fig 23). Internal sac moderately long and narrow, covered with very weakly sclerotized fine scales.

Differential diagnosis. *T. paraferox* sp. nov. differs from most other afro-tropical species by its parallel, uniformly dark brownish-black body. From similarly coloured species with a parallel body - *T. ferox* (Harold, 1881) differs by the presence of a six-lobed labrum (the labrum in *T. ferox* is not lobate, but rounded apically), shorter antennae and a distinctly smaller dent in the posterior angles of head.

Etymology. The species is named on account of its external similarity with *T. ferox* (Harold).

Bionomics. Nothing is known about the habitats of this species.

Distribution. The new species is only known from Angola.



Figs 29-34. *T. paraferox* sp. nov., PT, 29- head and pronotum, 30- labrum, 31- antenna; *T. ferox* (Harold), LT, 32- head and pronotum, 33- labrum, 34- antenna. Scale = 1 mm (29 = 32, 30 = 31 = 33 = 34).

***Thyreocephalus ferox* (Harold, 1881) comb. nov.**
(Figs 26-28, 32-34)

Xantholinus ferox Harold, 1881: 262.

Eulissus ferox; Bernhauer & Schubert 1914: 311 (catalog); Herman 2001: 3627 (catalog).

Eulissus methneri Bernhauer, 1937: 610 **syn. nov.**

Eulissus methneri; Herman 2001: 3627 (catalog).

Type material examined. *Xantholinus ferox* Harold. Lectotype (by present designation), (♂): „Hildebrndt.“ (green, handwritten), „60 750“ (white, printed), „Type“ (red, printed), „ferox * Har.“ (blue, handwritten), „Zool.Mus. Berlin“ (white, printed), (MFNB). The specimen is hereby designated as the lectotype. The label: „Lectotypus (♂) *Xantholinus ferox* Harold J. Janák des. 1991“ and my determination label: „*Thyreocephalus ferox* (Harold) J. Janák det. 1991“ were attached to this specimen.

Eulissus methneri Bernhauer. Holotype (♂): „Trockenwald b., Mtotchovu D. O. A., April 16 leg Methner“ (white, printed), „Methneri Brh., Typ. un.“ (white, handwritten), „Chicago NHMus, M. Bernhauer, Collection“ (white, printed), (FMNH). My determination label: „*Thyreocephalus, ferox* (Harold), J. Janák det. 2002“ was attached to this specimen.

Additional material examined. Tanzania: (1 ♀): „D. Ostafrika Makond. - Hochld. 12.XII.10 H. Grote S. G.“, „Nanyamba Ntschitschira“, „ferox Harold“, (MFNB); (1 ♂): „D. Ostafrika Makond. - Hochld. 15.-16.XII.10 H. Grote S. G.“, „Ntschitschira Mahirta-Newala“, (MFNB); (1 ♂): „Zanzibar“, „ferox Harold“, „ex typ.“, (IRSNB-coll. Fauvel).

Discussion. This species is exceptional among Afrotropical *Thyreocephalus* in having a broadly rounded labrum (Fig. 33).

Distribution. *T. ferox* was described from East Africa (probably Kenya). Precise hithertho known records originate only from Tanzania (including Zanzibar).

Bionomics. Nothing is known about the habitats of this species.

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