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Revision of the weevil genus *Ochtarthrum* FAUST, 1890*
(Coleoptera: Curculionidae: Brachyderinae)

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ABSTRACT. African species of the genus *Ochtarthrum* FAUST, 1890 are reviewed, keyed and figured. Redescriptions of *O. speciosum* FAUST, *O. humerale* FAUST, *O. fossulatum* FAUST and *O. aurivillusi* HELLER are given. *Cychrotonus basilewskii* VOSS is proposed as a n. syn. of *O. fossulatum*. Three new species are described and illustrated: *O. hiekei* sp. n. (Cameroon), *O. lechi* sp. n. (Ivory Coast) and *O. warchalowskii* sp. n. (Tanzania). Lectotypes of *O. fossulatum* and *O. humerale* are designated.

Key words: Entomology, revision, Afrotropical; *Coleoptera*, *Curculionidae*, *Brachyderinae*.

INTRODUCTION

This paper is the first concerning revisions of the Afrotropical broad-nosed weevils. From Ethiopian Region only few genera of *Brachyderinae* (sensu EMDEN 1936, 1944), mostly those of constant and distinct habitus, have been revised hitherto, namely: *Blosyrus* SCHÖNHERR, 1826 (HAAF, 1958), *Proscaphaladeres* SCHÖNHERR, 1840 and *Protostrophus* MARSHALL, 1919 (SCHALKWYK, 1968, 1971, 1972). Nevertheless correct identification of the majority of species of these genera is possible only by comparison with the type material. During my studies on many genera of Afrotropical *Brachyderinae* I observed that the same species were described in different genera belonging to various tribes and subfamilies (e.g. probably numerous brachyderin species were described in the subfamily *Otiorynchinae*), so revisions require examining extensive materials outside the subfamily *Brachyderinae*. Members of the genus *Ochtarthrum* are mostly related to species of the genera *Cychrotonus* PASCOE, 1871, *Chaunoderus* GERSTRECKER, 1871,

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Heterostylus FAUST, 1890, *Eucrines* JEKEL, 1875 ect., belonging to *Brachyderinae* and *Otiiorhynchinae*. All these genera are probably artificial but this problem needs further studies. I have examined many of their members and, in my opinion, characters used to separate all these genera are of little taxonomical value. Especially, such characters as the presence or absence of elytral shoulders, pyriform antennal club, and antennal scrobes visible from above evolved independently in many phylogenetic lineages. The genus *Ochtarthrum* is very close to the large genus *Cychrotonus* and distinguished only based on distinct elytral shoulders which in *Cychrotonus* are indistinct or reduced, but few species have shoulders almost as large as in species of the genus *Ochtarthrum*. The second character used in keys - pyriform antennal club - occurs also in several species of the genus *Cychrotonus*. The genus *Ochtarthrum* represents probably only two specialized lineages within the large and heterogenous genus *Cychrotonus*, but this problem will be verified only after the revision of all the genera close to *Cychrotonus*.

I have examined specimens from the following institutions and collections (names of curators in brackets):

IZPAS - Museum and Zoological Institute, Polish Academy of Sciences, Warsaw, Poland (S. A. ŚLIPIŃSKI),

JK - author's coll.,

MRAC - Museum Royal d' Afrique Centrale, MRAC, Belgium, (H. M. ANDRÉ),

NRS - Naturhistoriska Riksmuseet, Stockholm, Sweden (B. VIKLUND),

SMTD - Staatliche Museum für Tierkunde Dresden, Germany, (R. KRAUSE),

ZMHU - Zoologisches Museum, Humboldt Universität, ZMHU, Germany, (F. HIEKE).

Ochtarthrum FAUST, 1890

Ochtarthrum FAUST, 1890: 171-173; 1899: 322; EMDEN, F., 1936: 215.

Ochtarthrum FAUST: HUSTACHE, 1918: 195.

Type species: *Ochtarthrum speciosum* FAUST, 1890 (by monotypy).

Moderately large weevils, body length 10.4-20.8 mm. Body elongate oval, covered by adhering and erect, oval to elongate scales. Head separated from rostrum by V-shaped transverse furrow. Eyes regularly convex. Rostrum as long as wide, with median, paracentral and lateral carinae. Frons with median row. Antennal club pyriform. Pronotum with impressions. Elytra with distinct shoulders, foveolate or striatopunctate, punctures on sides often with tubercles. Corbels enclosed. Claws fused.

The genus *Ochtarthrum* FAUST, 1890 was proposed for *O. speciosum* FAUST, 1890 in the subfamily *Cyphinae* sensu lato (= *Brachyderinae* partim). EMDEN (1936, 1939) placed it in his tribe *Dermatodini* EMDEN based on well developed shoulders and enclosed corbels, the only combination of characters in the tribe, in opposition to the genera of the tribe *Cneorrhinini* characterized also by enclosed corbels but

with reduced shoulders. In my opinion his division of genera with closed corbels into two tribes is artificial because the tendency to reduce shoulders evolved independently in many phylogenetic lineages within *Brachyderinae* and *Otiorynchinae*. In some genera of *Cneorrhinini* (i.e. *Cychrotonus*) there are species with shoulders more or less developed. But I do not propose any formal synonymization of these tribes before a revision of all the genera close to *Cychrotonus* is completed.

I have grouped species of the genus *Ochtarthrum* in two groups. The first includes *O. fossulatum* and *O. warchalowskii* sp. n., the second the remaining five species. The first group is distinguished by sparse body vestiture (moderately thick to thick in the second group), elytra foveolate (punctatostriate), and bisexual populations (probably parthenogenic, I have examined no male of the second group). I have some doubt whether both lineages are phylogenetically close because some members of the genus *Cychrotonus* (i.e. *C. laticollis* HUSTACHE, 1923 and *C. saegeri* HUSTACHE, 1937) are closer to species of the second group (probably also parthenogenic but with slightly less developed shoulders) than species of the second group are to the species of the first group.

KEY TO THE SPECIES

1. Pronotal disc in the middle with a large, wide and deep impression. Surface of elytra foveolate. Intervals at most as wide as rows. Elytral vestiture sparse, composed of scales of various shape 2.
- Pronotal disc without impression in the middle, at most with irregular surface and deep transverse impression behind front margin or with slight impressions on each side. Surface of elytra striatopunctate. Intervals several times wider than rows. Elytral vestiture dense, composed of oval or round scales 3.
2. Elytral foveae large and deep, distance between foveae convex, rows irregular. Third elytral interval in apical part moderately convex. Prosternal process with scales *fossulatum*
- Elytral foveae smaller and moderately deep, distance between foveae flat, rows regular. Third elytral interval in apical part strongly convex, forms an obtuse costa. Prosternal process with setae *warchalowskii* sp. n.
3. Both rows and intervals with scales, elytra do not appear longitudinally striate 4.
- Only intervals with scales, rows bare, so elytra appear longitudinally striate 6.
4. Elytra with long, erect setae, slightly shorter than width of interval. Intervals 3, 5 and 7 on whole length, intervals 1-2 in posterior half of elytra distinctly convex *aurivilliusi*
- Elytra without erect setae. All intervals in anterior half flat, in posterior half slightly convex 5.
5. Adhering scales on elytra not overlapping. Erect scales on elytra distinct, about 1.5 times longer than the adhering scales. Median carina on rostrum weakly convex only at the base of rostrum *hiekei* sp. n.

- Adhering scales on elytra overlapping. Erect scales weakly visible, slightly longer than the adhering scales. Median carina on rostrum distinctly convex on whole length *lechi* sp. n.
- 6. Surface of pronotum regular, pronotal outline regular, not crenulate. Pronotum on each side in posterior and anterior half with shallow impression *speciosum*
- Surface of pronotum irregular, pronotal outline crenulate. Pronotum behind front margin with deep transverse impression. *humerales*

***Ochtarthrum speciosum* FAUST, 1890**

(Figs. 1-9)

Ochtarthrum speciosum FAUST, 1890: 171-172; 1896: 116; 1899: 321; HELLER, 1904: 178; EMDEN and EMDEN, 1939: 222.

Ochtarthrum speciosum: HUSTACHE, 1918: 195.

DIAGNOSIS

This species is characterised by green-gold or pearl and brown, shining scales only on intervals, so elytra appear longitudinally striate, by a pair of shallow impressions on each side of pronotum, first in anterior fourth and second behind the middle, and regular pronotal surface. Similarly striated elytra occur also in *O. humerales*, but it differs in pronotal disc without impressions on sides but with transverse impression behind the anterior margin, and irregular pronotal surface.

DESCRIPTION

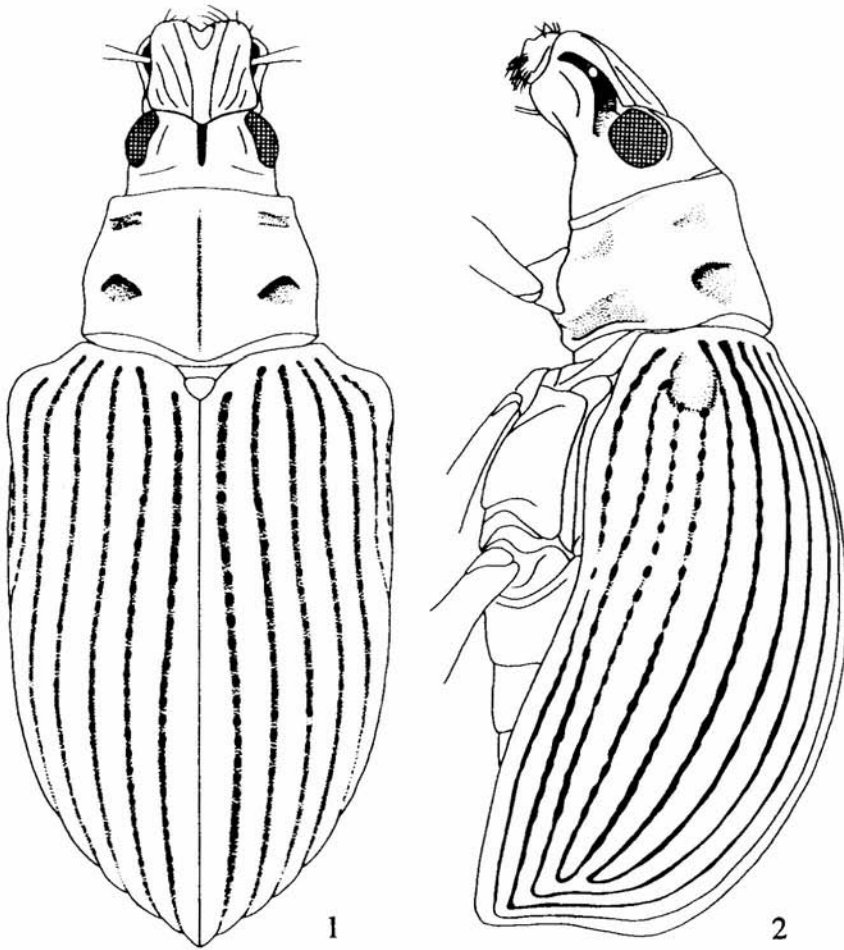
Length: 12.5 mm, width: 5.4-5.6 mm.

Body elongate, oval; elytra weakly rounded on sides, convex (figs 1, 2); colour light-brown or dark-brown, surface covered by green-gold or pearl and brown shining scales. Adhering scales two times longer and narrower than the erect scales. Middle carina of rostrum, epinotum, narrow line on the middle of pronotum and rows of elytra without scales. In the holotype green-gold scales cover the base of head, pronotum, intervals, scutellum and body venter while gold-pink scales cover frons, rostrum, antennae, femora and tibiae. In specimen from Bénito pearl scales have rather celadon or light-brown tint. Median carina on the rostrum and elytral intervals shining, bare apex of rostrum punctate and with regular microsculpture.

Head slightly dilated behind eyes, separated from rostrum by narrow V shaped transverse furrow forming obtuse angle. Frons flat, in the middle with a narrow deep furrow, shallower backwards. Rostrum the narrowest in the middle, length/width ratio of rostrum 0.81-0.93. Rostrum in the middle with smooth, shining carina reaching from transverse furrow to base of antennae, ending in a smooth, v-shaped field. In front of eye an additional carina extending to 0.3 rostrum length, paracentral carina curved outwards, reaching antennal base. Apical part of median and paracentral carina connected with transverse fine fold. Antennal scrobe in anterior 2/3 length

visible from above, in lateral view c-shaped. Gena with two shallow longitudinal impressions. Eyes moderately convex. Antennae long, antennal scape slightly curved with sharp posterior margin (fig. 8).

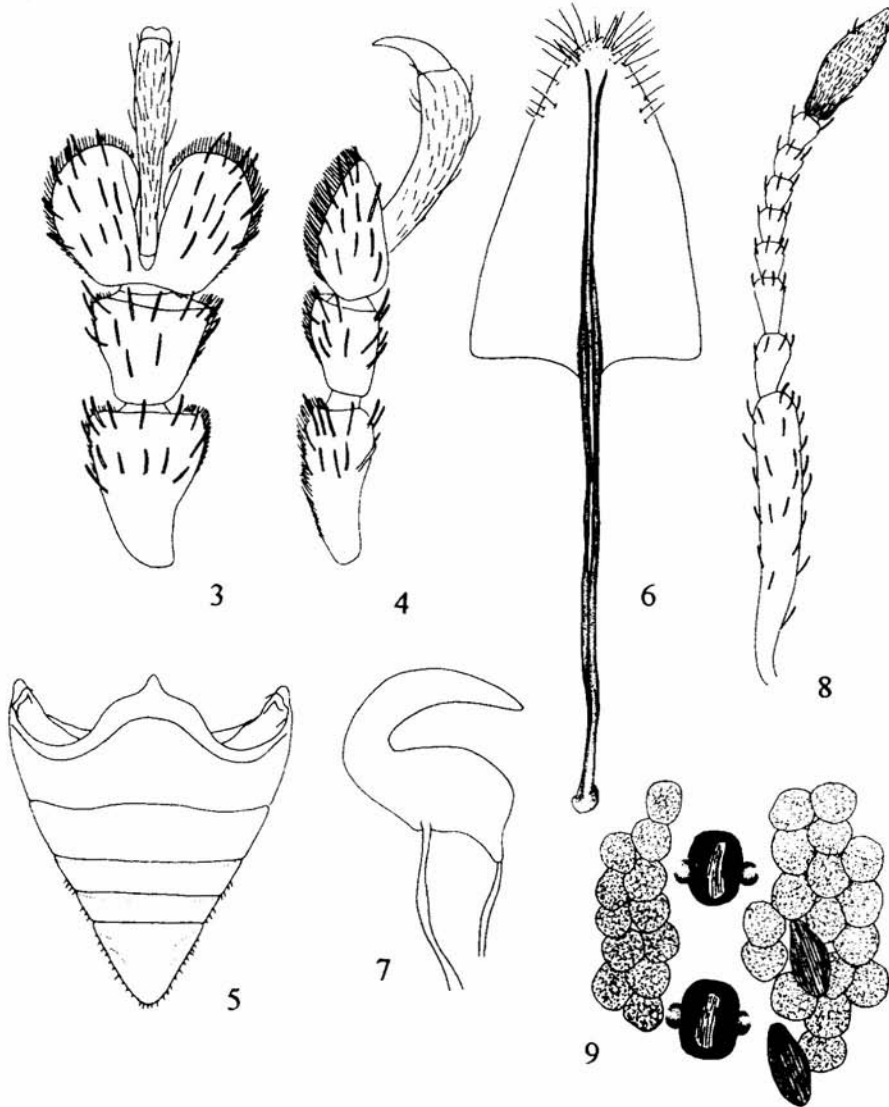
Pronotum narrowed from base to front margin, weakly dilated in the middle, the widest at the base; width/length ratio 1.33-1.42. Surface of pronotum weakly depressed. Front margin straight, base bisinuate. On each side two pairs of impressions, the first in anterior half of side and the second, more oblique and deeper behind the middle.



1, 2. *Ochtarthrum speciosum*: 1 - body in dorsal view, 2 - body in lateral view

Scutellum depressed, oval, front margin straight.

Elytra with the maximum width in the middle, 1.57-1.7 times longer than wide, surface distinctly convex, to half of length almost parallelsided. Shoulders distinct, moderately rounded and weakly protruding laterally. Punctures in rows oval, gradually smaller to apex of elytra, each puncture armed with scale and on the sides with two small, black tubercles. Distance between punctures as long as puncture length (fig. 9). Intervals 2.5 times wider than rows. Rows 1-6. visible from above, in



3-9. *Ochtarthrum speciosum*: 3 - fore tarsus in dorsal view, 4 - fore tarsus in lateral view, 5 - abdominal sternites, 6 - genital sclerite, 7 - spermatheca, 8 - antenna, 9 - punctures and scales of elytra

anterior half slightly curved towards the suture, in posterior lateralwards. Row 7. visible from above only in anterior part. Intervals at slope connected as in fig. 2. Intervals flat (specimen from Bénito), or intervals 7.-10. in front part strongly convex (holotype).

Abdominal sternites as in fig. 5.

Legs slender, tarsi as in fig. 3, 4, anterior tibiae straight. Apex on anterior tibia slightly dilated externally with tuft of white setae, and strongly dilated internally. Ventral margin of anterior tibia with a row of long, sharp spines. Ventral margin of hind tibiae without spines or tubercles.

Female genitalia as in figs 6, 7.

DISTRIBUTION

Gabon, Equatorial Guinea. Erroneously recorded from Madagascar by EMDEN and EMDEN (1939), based on misinterpretation of HUSTACHE's (1918) key to the Malgasy genera of the *Brachyderinae*.

TYPE MATERIAL EXAMINED

Holotype female: "Gabun, Baden"; "*speciosum*, FAUST" [both white, handwriting, black ink]; "Type" [red, black print]; "[little gold square]"; "Coll. J. FAUST, Ankauf 1900" [blue, black print]; "Staatl. Museum für Tierkunde Dresden" [white, black print]; (SMTD).

OTHER MATERIAL EXAMINED

Equatorial Guinea: Bénito, (det.?: *Ochtarthrum modestum* n. sp.) coll. K. F. HARTMANN, 1 female (SMTD).

Ochtarthrum humerale FAUST, 1896

(Figs. 10-18)

Ochtarthrum humerale FAUST, 1896: 116-117; 1899: 321; HELLER, 1904: 178-179; EMDEN, F., 1936: 215; EMDEN and EMDEN, 1939: 222.

DIAGNOSIS

Like in *O. speciosum* elytra in *O. humerale* are longitudinally striate, but surface of pronotum is irregular, with distinct, deep furrow behind the front margin (regular in *O. speciosum* with two impressions of each pronotal side).

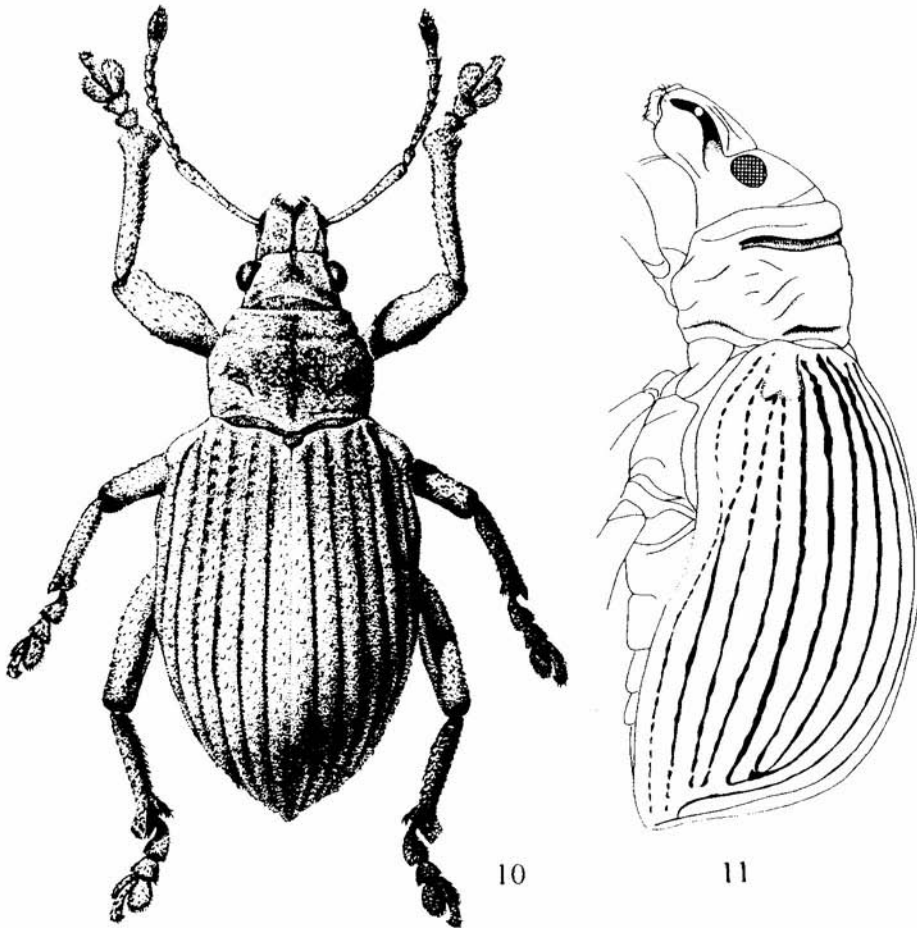
DESCRIPTION

Length: 11.6-17.5 mm, width: 5.0-8.2 mm.

Body elongate-oval (fig. 10), elytra distinctly convex (fig. 11). Body black or light-brown, occasionally only pronotum black or pronotum and elytra partly black. Adhering scales round or oval, pearl, cream-colored and cream-yellow, overlapping

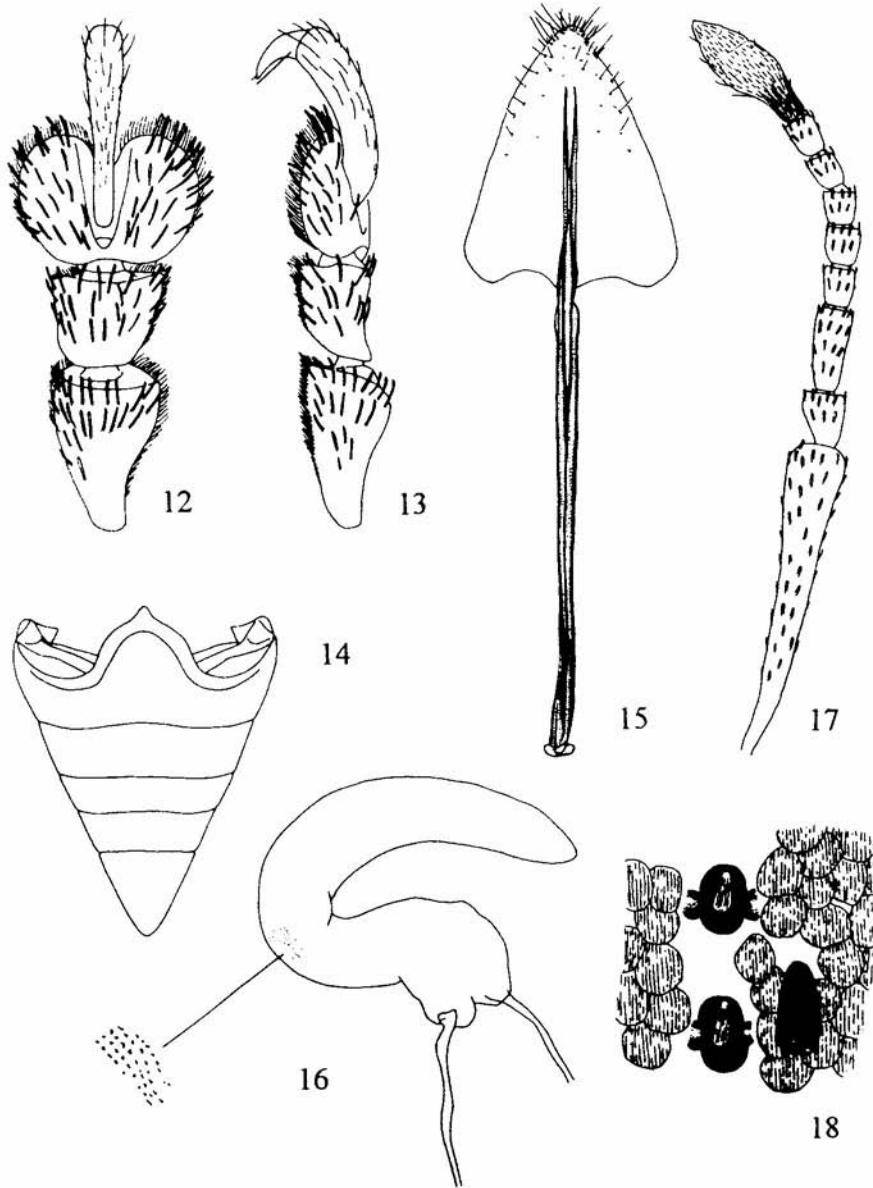
(fig. 18). Erect scales 2 times longer and slightly broader than the adherent scales, at apex truncate, cream-yellow or light-brown, always darker than the adherent scales. Middle of frons, vertex, surface of pronotum with irregular, loosely adhering scales. Median carina of rostrum, median carina of pronotum and rows of elytra without scales. Antennae covered by adhering scales smaller than those of elytral intervals, oval or strongly extending and connected, and erect scales slightly darker, broader and longer.

Head dilated behind the eyes, separated from rostrum by sharp and deep V shaped transverse furrow interrupted in the middle by median carina of rostrum. Frons with narrow and deep furrow. Median carina of rostrum narrow, sharp, reaching from transverse furrow to the base of antennae, anterior end slightly dilated



10, 11. *Ochtarthrum humerale*: 10 - body in dorsal view, 11 - body in lateral view

and flattened. Paracentral carina and lateral carina high. Paracentral carina curved, reaching to the side of rostrum at the base of antennae, lateral carinae shorter,



12-18. *Ochtarthrum humerale*: 12 - fore tarsus in dorsal view, 13 - fore tarsus in lateral view, 14 - abdominal sternites, 15 - genital sclerite, 16 - spermatheca, 17 - antenna, 18 - punctures and scales of elytra

slightly converging anterad. Transverse furrow, paracentral and lateral carina thickly covered by scales and slightly visible especially in small specimens. Rostrum as long as wide, apex slightly dilated and wider than frons. Antennal scrobe visible from above in anterior 5/7 length. Frons on sides weakly convex, vertex strongly convex. Eyes moderately large, regularly and strongly convex. Antennae long, antennal scape almost straight, hind margin obtuse (fig. 17).

Width/length ratio of pronotum 1,3; sides moderately rounded, more converging anterad than posterad, with maximum width in the middle. Front margin almost straight, hind margin slightly bisinuate. Surface of pronotum irregular, in the middle with narrow, low carina reaching from pronotal base almost to its middle or occasionally to transverse furrow at front pronotal margin. Sides of pronotum rugose and their outline appears slightly crenulate. Behind the front pronotal margin deep, wide and transverse furrow, parallel to the margin, fringed at the front by distinct carina.

Scutellum pentagonal, slightly transverse.

Elytra oval, slightly convex, with maximum width slightly behind the middle. Punctures in rows deep, oval. Distance between punctures slightly smaller or larger than puncture diameter (fig. 18). Rows the widest at base of elytra and gradually narrower posterad. Intervals wide, the widest in half length of elytra, particularly intervals 2. and 3., in the widest part five times, at base two times wider than rows. Intervals 1.-3., 5 and 7. strongly convex, remainder moderately convex. At slope of elytra rows connected as in fig. 11. Shoulders distinct, rounded.

Abdominal sternites as in fig. 14.

Legs long, slender, fore tibiae slightly curved outwards, at apex dilated, less outwards, more inwards. Tarsi slender (figs 12, 13).

Female genitalia as in figs 15, 16.

DISTRIBUTION

Tanzania.

TYPE MATERIAL EXAMINED

Lectotype female (present designation): "Tanga, HARTMANN"; "*humeralis* FAUST" [both labels handwritten, black ink]; "Type" [black on red]; "Coll. J. FAUST, Ankauf 1900" [black on blue]; [gold square label]; "Staatl. Museum für Tierkunde Dresden" [black on white]; (SMTD).

OTHER MATERIAL EXAMINED

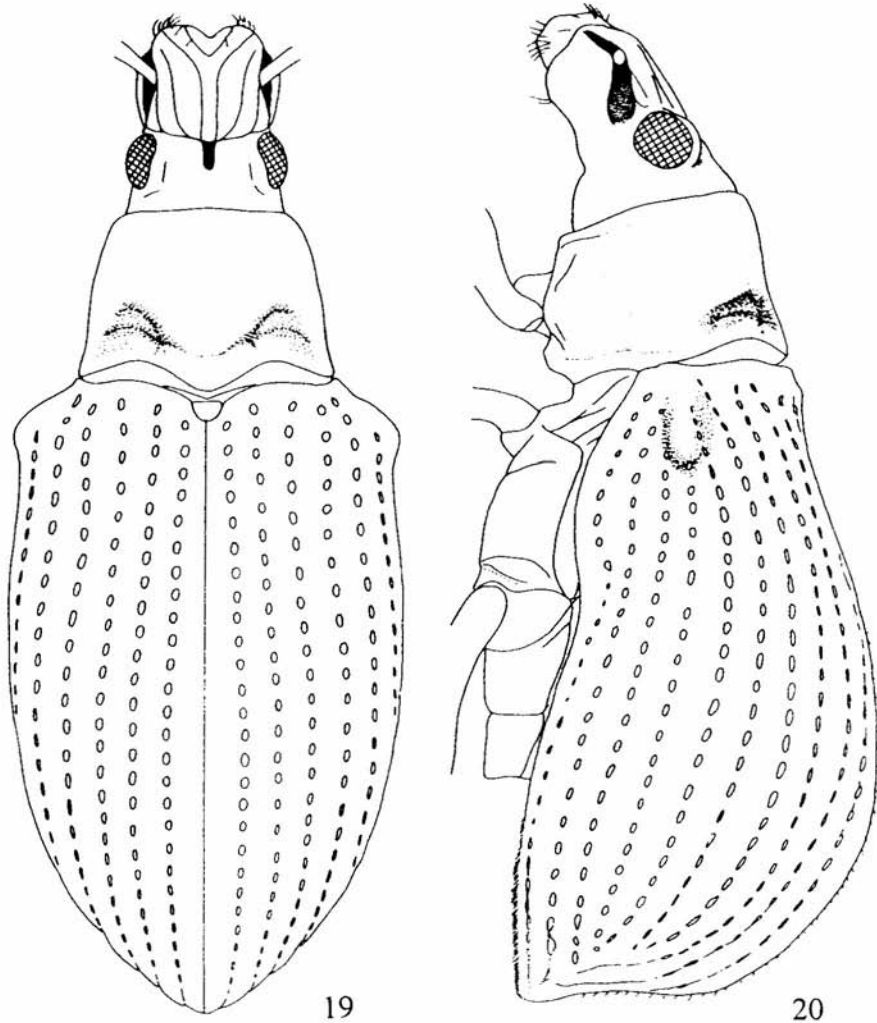
Tanzania: Usambara, Gehr. W. MÜLLER, 2 females, (SMTD); Nguela, Usambara, Coll. C. FELSCH, 2 females (SMTD); Tanga - HINTZ, Samml. K. F. HARTMANN, 2 females, (SMTD); Usambara, Hinterland v. Tonga, leg. HEINSEN, 3 females, (2 ZMHU, 1 JK).

Ochtarthrum hiekei sp. n

(Figs 19-27)

DIAGNOSIS

Similar to *O. speciosum* FAUST, but the new species differs in sparse scales of both elytral rows and intervals (in *O. speciosum* scales occur only in intervals but densely) and in pronotal impression only in basal part of each side (in *O. speciosum* each side of pronotum with impression in anterior fourth and behind the middle).

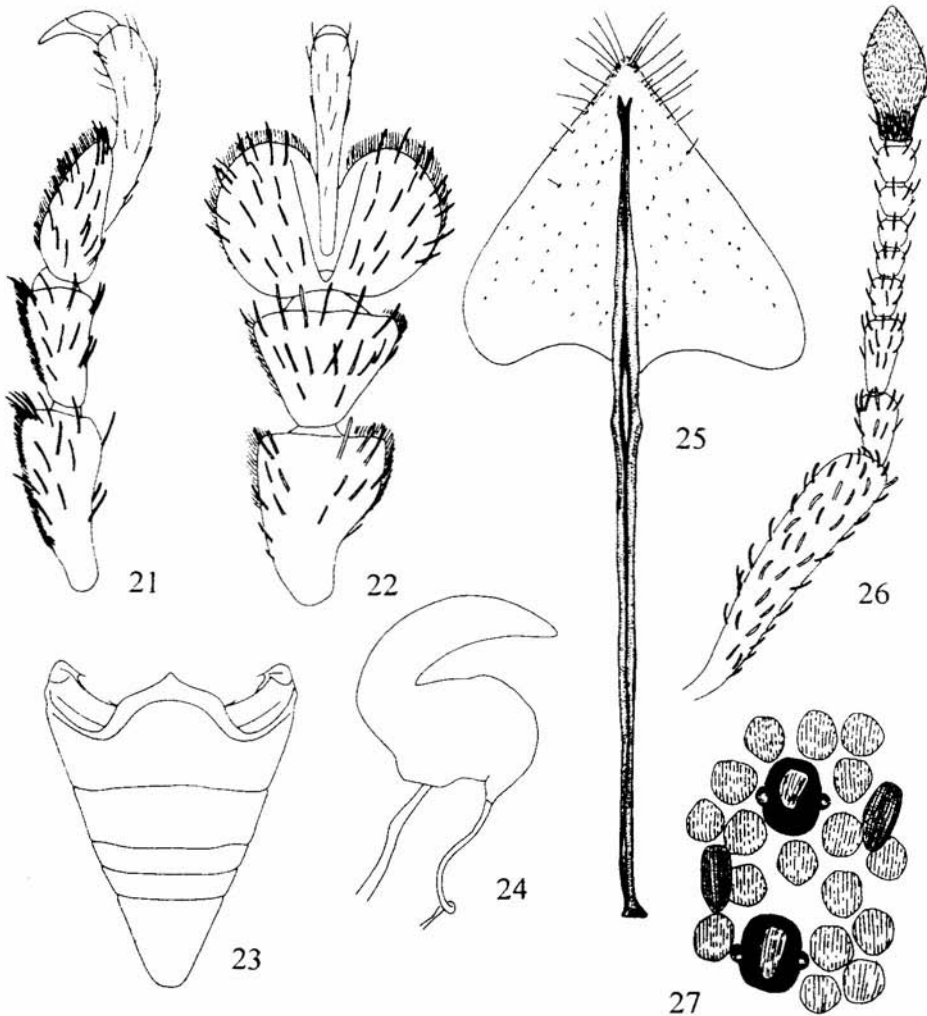


19, 20. *Ochtarthrum hiekei*: 19 - body in dorsal view, 20 - body in lateral view

DESCRIPTION

Length: 11.4-12.5 mm, width: 5.0-5.5 mm.

Body elongate oval (fig. 19), moderately convex (fig. 20), black or brown, strongly shining, with microsculpture. Adhering scales of elytra oval or round, pearl, light-green and green. Erect scales light-brown, at apex rounded, 1.5-2 times longer and weakly narrower than the adhering ones (fig. 27). The whole body



21-27. *Ochtarthrum hiekei*: 21 - fore tarsus in dorsal view, 22 - fore tarsus in lateral view, 23 - abdominal sternites, 24 - spermatheca, 25 - genital sclerite, 26 - antenna, 27 - punctures and scales of elytra

surface completely covered by sparse scales (only middle carina on the rostrum without scales), as a rule not connected with each other, sometimes on suture interval connected or overlapping. Adhering scales on tarsi and antennae distinctly narrower than elytral scales, on 3. and 4. tarsal segment setiform. Legs and antennae with strongly erect black-brown setae (figs 21, 22, 26).

Head slightly dilated behind the eyes, separated from rostrum by V-shaped transverse furrow, narrow and deep on sides and very narrow and shallow in the middle. Median carina on the rostrum wide, shining, at base of rostrum moderately convex, reaching from transverse furrow to base of antennae. Paracentral and lateral carinae distinctly narrower than median one. Paracentral carina curved outwards, ends before lateral edge of rostrum at base of antennae. Lateral carina straight, reaching half distance between the transverse furrow and base of antennae. Frons with narrow and long median furrow, ends in line connecting posterior margin of eyes. Frons along margin of eyes slightly convex. Antennal scrobe visible from above on 4/5 length. Eyes moderately convex. Antennae as in fig. 26, posterior margin of scape obtuse.

Width/length ratio of pronotum 1.3-1.4, maximum width at base, sides regularly converging anterad. Base of pronotum slightly impressed, each side with a pair of shallow impressions. Front margin straight, base bisinuate. Along the middle of pronotum narrow line without scales, sometimes slightly impressed in posterior third.

Scutellum slightly wider than long to slightly elongate, apex rounded.

Elytra elongate, about 1.6 times longer than wide, with maximum width in the middle, slightly rounded on sides, surface moderately convex. Punctures in row oval. Distance between punctures as wide as puncture diameter or slightly larger. Intervals flat, 2.5-3 times wider than rows. At slope of elytra rows connected as in fig. 20. Shoulders distinct, moderately rounded.

Abdominal sternites as in fig. 23.

Legs long, slender, fore tibiae more or less curved outwards, at apex slightly dilated outwards, strongly dilated inwards. Tarsi moderately long (figs 21, 22).

Female genitalia as in figs 24, 25.

DISTRIBUTION

Cameroon.

TYPE MATERIAL EXAMINED

Holotype female: "S.O.Kamerun, Lolodorf, 19.II-7.VI.95, L. CONRADT S." [black on blue]; (ZMHU); Paratypes: "Westafrika, Uelleburg, VI.-VIII.08., TEßMANN S. G." [black on blue]; 1 female (ZMHU); "Kamerun, Lolodorf, HEYNE V." [black on blue] 1 female (J.K.).

Etymology: Dedicated to Dr. F. HIEKE, the curator of the *Coleoptera* collection in the ZMHU.

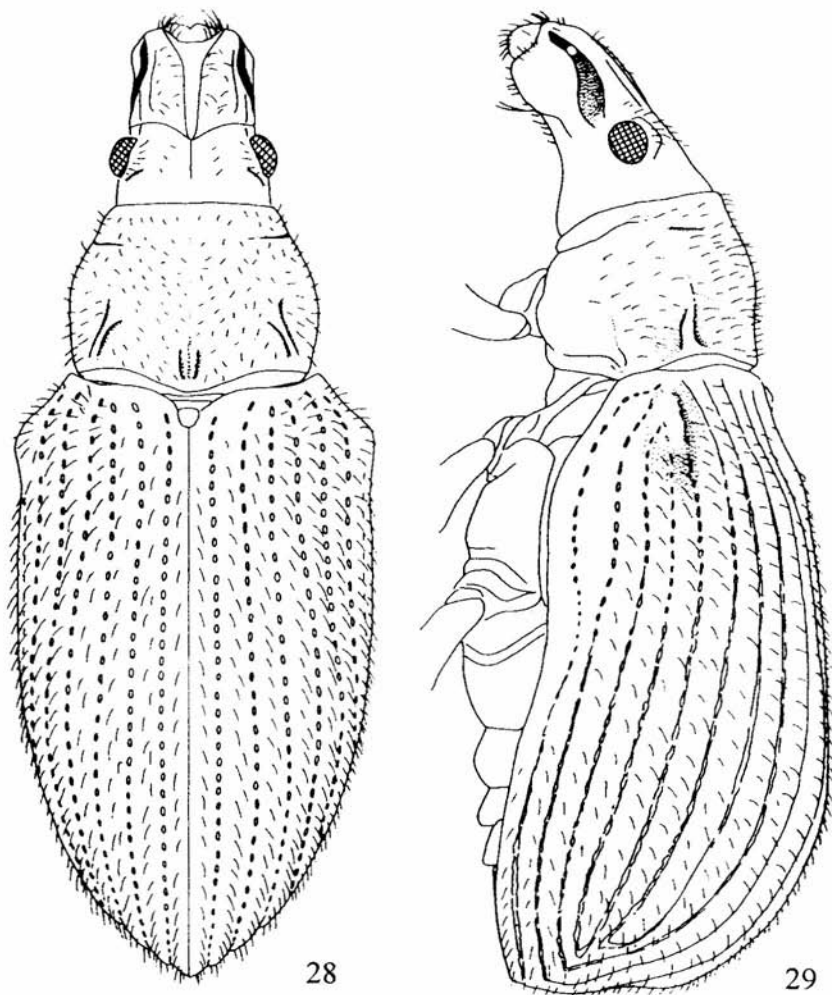
Ochtarthrum aurivilliusi HELLER, 1904

(Figs 28-37)

Ochtarthrum aurivilliusi HELLER, 1904: 178-179; EMDEN and EMDEN, 1939: 222.

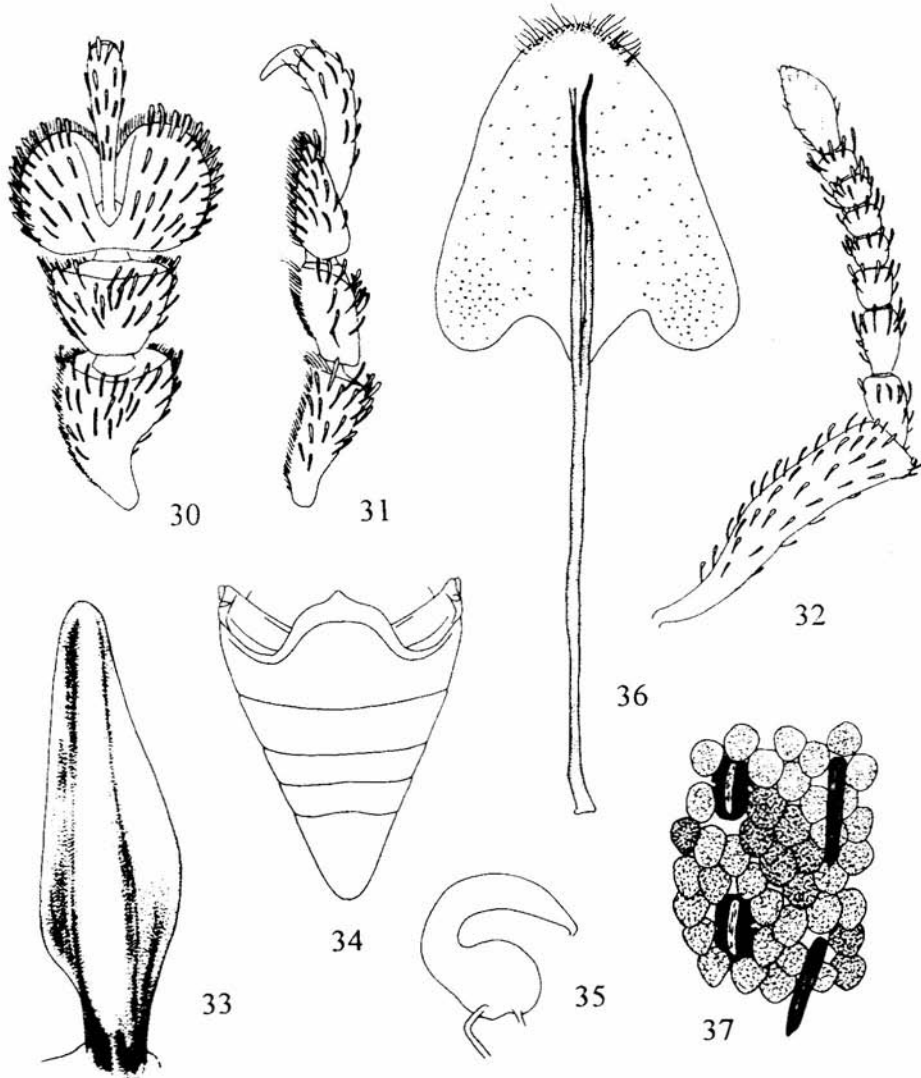
DIAGNOSIS

It is a unique species, characterized by very long erect scales, especially on elytra (fig. 37). The whole body surface, including rows, completely covered by



28, 29. *Ochtarthrum aurivilliusi*: 28 - body in dorsal view, 29 - body in lateral view

adherent scales, on elytra overlapping. Antennal scape strongly dilated and curved, scape and funicular joints of antennae with long, curved scales, funicular joints 4-7 transverse. Each side of pronotal base with oblique carina. Rostrum with high smooth median carina.



30-37. *Ochtarthrum autivilliusi*: 30 - fore tarsus in dorsal view, 31 - fore tarsus in lateral view, 32 - antenna, 33 - mandibular process, 34 - abdominal sternites, 35 - spermatheca, 36 - genital sclerite, 37 - punctures and scales of elytra

DESCRIPTION

Length: 11.1 mm, width: 4.8 mm.

Body elongate oval, brown (fig. 28), elytral disc flat (fig. 29), sides slightly converging posterad. The whole body surface, except median carina of rostrum, completely covered by adhering and erect scales. Adhering scales oval or with apex acute, connected or overlapping (fig. 37), light-brown and dark-brown, slightly shining, sometimes, especially on elytra, green and red, strongly shining. Dark-brown scales cover frons, antennae, surface of pronotum, surface of elytra and apical part of femora. Elytral dark-brown scales form a characteristic pattern: dark stripe from base to apex of intervals 1-3, and three transverse bands: 1st near base of elytral intervals 4-5, 2nd in half length of intervals 4-6, 3rd before apex of intervals 4-8. Erect scales elongate, dark-brown, darker than the adhering scales, on head, antennae and femora more or less curved, apex rounded or obliquely truncate, on frons 3-4 times longer than the adhering scales, on pronotum erect scales as long as on head, but less curved, on elytra five times longer than the adhering scales, straight, slightly oblique, apex acute.

Head slightly dilated behind the eyes, separated from rostrum by deep and narrow, v-shaped transverse furrow, in the middle not interrupted. Rostrum flat, in lateral view median carina convex. Median carina reaching to the base of antennae, distinctly convex, shining, from the base to top weakly dilated. Lateral carinae reaching to half distance between the base of rostrum and the base of antennae. Frons flat, with deep and narrow median row. Vertex broadly convex. Eyes small, slightly eccentrically convex. Antennal scrobe visible from above almost on whole length. Antennae moderately long, scape curved, segments 1 and 2 the longest, segment 3 distinctly shorter than 1 and 2 but longer than the remaining transverse segments (fig. 32). Mandibular process as in fig. 33.

Width/length ratio of pronotum 1.3, maximum width in the middle, sides slightly rounded. Pronotal disc slightly convex, behind front margin weakly emarginate. Each side of pronotal base with oblique carina impressed along sides. Along the middle of disc median line without scales extending from pronotal base to emargination behind the anterior margin.

Scutellum slightly longer than wide, parallelsided, with round apex.

Elytra elongate, about 1.7 times longer than wide, from shoulder-region to half length parallelsided. Shoulders moderately rounded and weakly protruding laterally. Intervals 4-5 times wider than rows, distinctly elevated, especially 3rd, 5th and 7th, intervals 1-2 strongly elevated only in posterior half of elytra. Punctures in row elongate. Distance between punctures as wide as puncture diameter or slightly larger. Rows 4, 5 and 6, 7 in slope connected as in fig. 29.

Abdominal sternites as in fig. 34.

Legs moderately long, fore tibiae straight, at apex strongly dilated outwards and inwards. Tarsi moderately long (figs 30, 31).

Female genitalia as in figs 35, 36.

DISTRIBUTION

Cameroon.

TYPE MATERIAL EXAMINED

Holotype female: "Camerun"; "SJÖSTEDT" [both black on white]; "Typus" [black on red]; "typus !" [black on pink]; "*Ochtharthrum aurivilliusi* m. Determ. K. M. HELLER" [only name handwritten, black on white]; "9574 E91 +" [black on blue]; (NRS).

Ochtharthrum lechi sp. n.

(Figs 38-46)

DIAGNOSIS

The smallest species. It is characterized by a high median carina of rostrum, dense body vestiture with green and coppery scales mixed with hardly visible, slightly erect brown scales approximately as long as adhering scales, in setiform scales of elytral punctures, and in shallow impression on each side of pronotum behind anterior margin.

DESCRIPTION

Length: 10.4 mm, width: 4.6 mm.

Body elongate oval (fig. 38), slightly convex (fig. 39), brown; elytra, ventrites and femora somewhat lighter. Whole body thickly covered by oval adhering and overlapping scales (fig. 46). Scales shining, green, gold-green, coppery and coppery-pink. Weakly erect scales occur on whole body surface, considerably sparser, narrower and as long as adhering scales, slightly dilated and with rounded apex. Antennae and legs with light-green, narrow adhering scales and with erect brown setae. Median carina on rostrum without scales. Body surface with microsculpture.

Head dilated behind eyes, separated from rostrum by narrow and sharp V-shaped transverse furrow interrupted in the middle. Median carina on rostrum high, conspicuous, broad, extending from base to about half length of rostrum, at apex dilated and flattened. Lateral carina oblique, reaching to side of rostrum near the base of antennae. Along lateral carina runs an oblique furrow. Paracentral carina indistinct. Frons on each side slightly convex, with narrow and deep median row. Eyes moderately convex. Antennae slender, short, antennal scape slightly dilated towards apex and slightly curved with obtuse posterior margin, funicular segments 1, 2. long, others about as long as wide (fig. 42).

Width/length ratio of pronotum about 1.45, sides slightly rounded, maximum width slightly behind the middle. Pronotal disc weakly convex, each side behind front margin distinctly impressed. Front margin straight, base bisinuate.

Scutellum slightly elongate, brown with black border, sparsely covered by adhering scales, apex rounded.

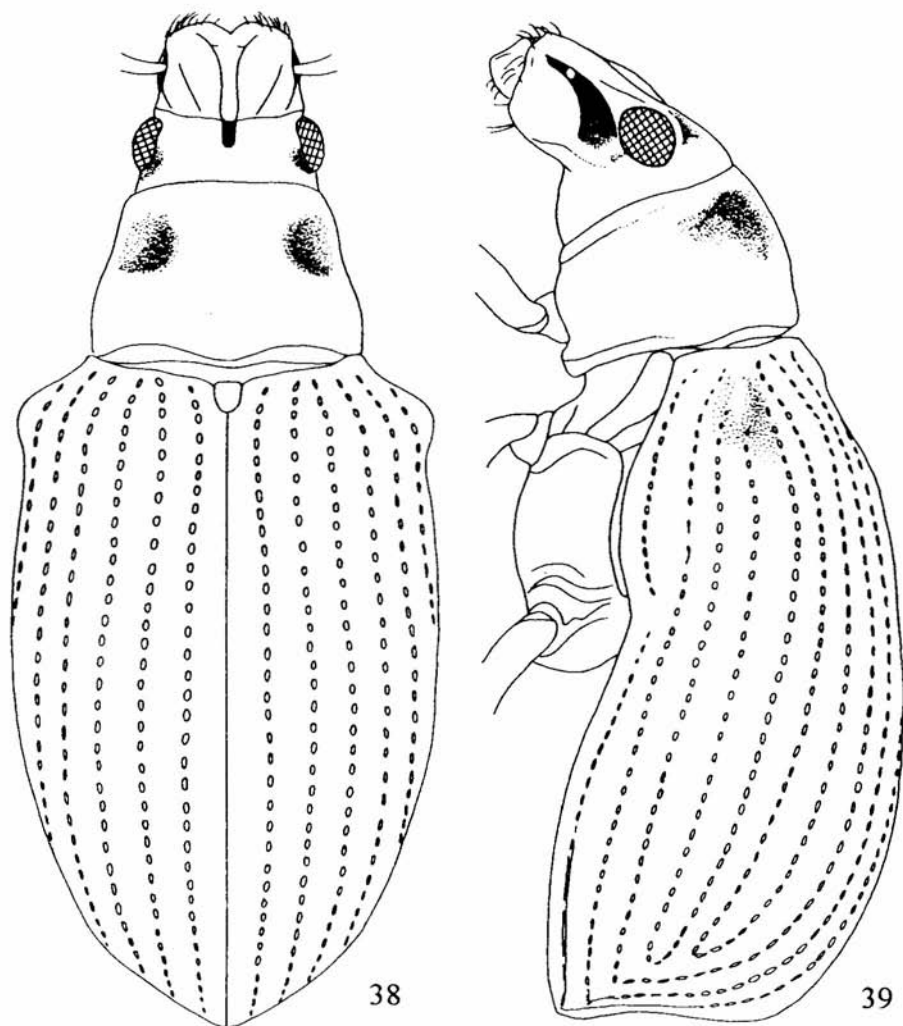
Elytra oval, moderately convex, with maximum width in the middle, 1.6 times longer than wide. Shoulders distinct, moderately rounded and weakly protruding

laterally. Rows narrow with oval punctures. Distance between punctures as wide as puncture diameter. Intervals moderately convex, 6 times wider than rows. At slope clytral rows connected as in fig. 39.

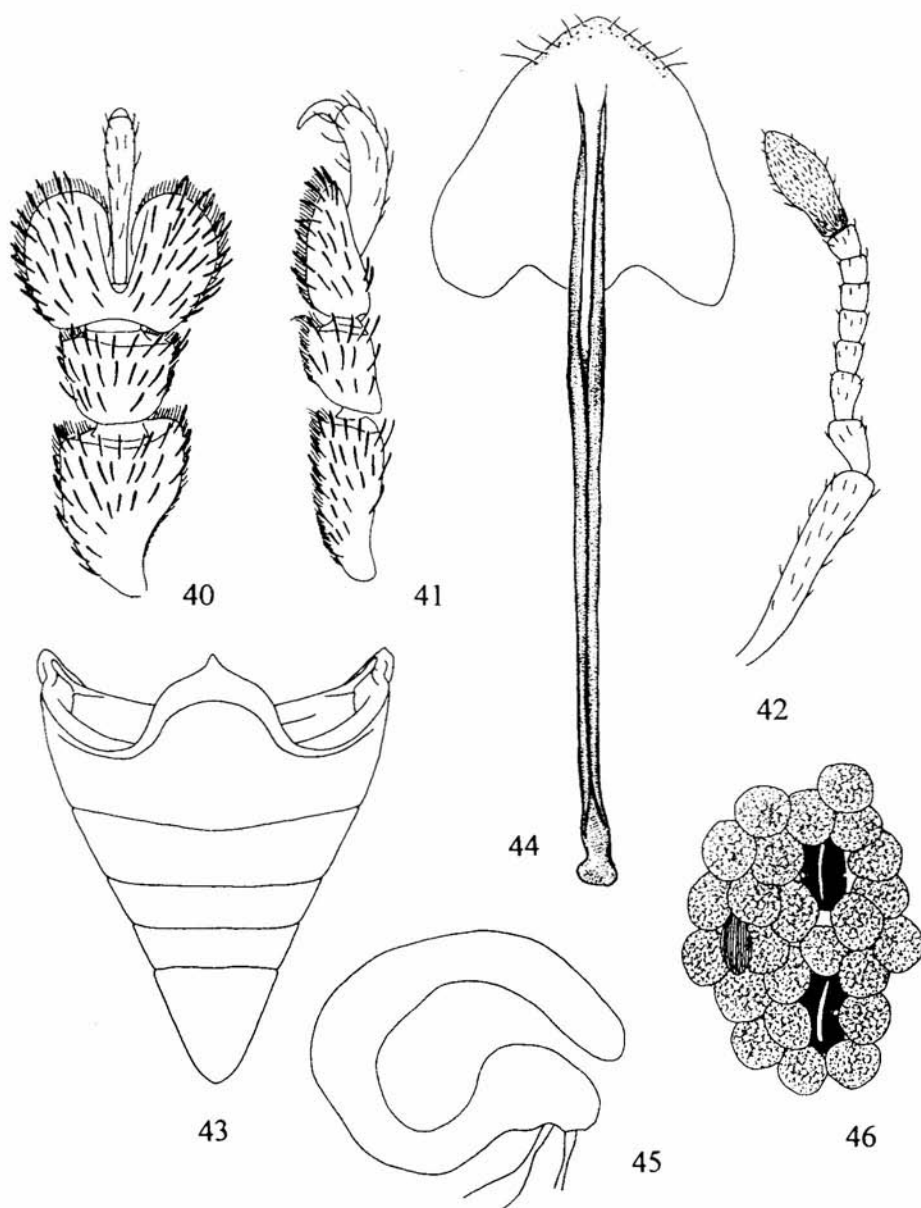
Abdominal sternites as in fig. 43.

Legs slender, fore tibiae straight, at apex strongly dilated both outwards and inwards. Tarsi moderately long (fig. 40, 41).

Female genitalia as in figs 44, 45.



38, 39. *Ochtarthrum lechi*: 38 - body in dorsal view, 39 - body in lateral view



40-46. *Ochtarthrum lechi*: 40 - fore tarsus in dorsal view, 41 - fore tarsus in lateral view, 42 - antenna, 43 - abdominal sternites, 44 - genital sclerite, 45 - spermatheca, 46 - punctures and scales of elytra

DISTRIBUTION

Ivory Coast.

TYPE MATERIAL EXAMINED

Holotype female: "Coll. Mus. MRAC, Côte d'Ivoire: Akoupé 25 km. N. Abidjan, J. DECELLE, X - 1962" [black on white] (MRAC).

Etymology: Dedicated to my friend Dr. Lech BOROWIEC, an excellent specialist in the family *Chrysomelidae*.

Ochtarthrum fossulatum FAUST, 1899

(Figs 47-57)

Ochtarthrum fossulatum FAUST, 1899: 321-322; HELLER, 1904: 179; EMDEN and EMDEN, 1939: 222.
Cychrotonus basilewskii Voss, 1962: 282-283 **syn. n.**

DIAGNOSIS

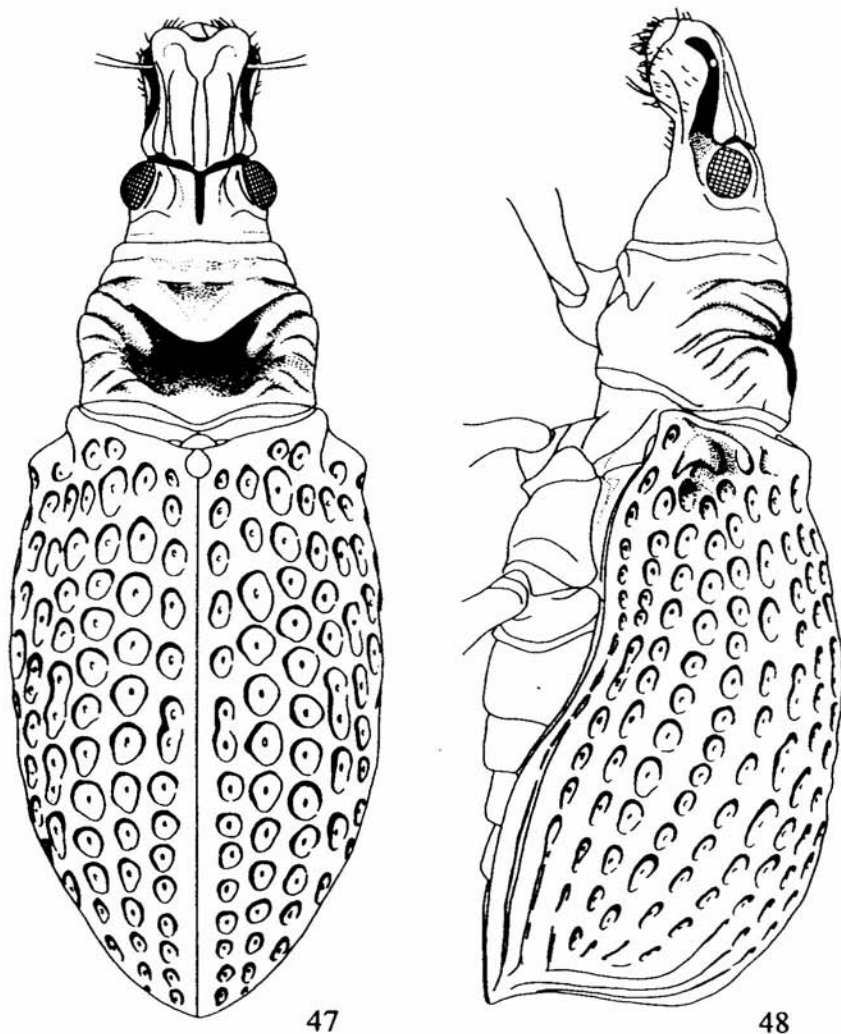
It is very close to *O. warchalowskii* sp. n. Both species have a large and deep impression in the middle of pronotal disc, sparse elytral vestiture composed of scales of various shape, and foveolate elytra. *O. fossulatum* differs in the shape of pronotal impression (figs. 47, 58), more crenulate pronotal outline, larger and deeper elytral fovea, longer rostrum, stouter antennae, prosternal process with scales (in *O. warchalowskii* only with hair), and third elytral interval in apical part moderately convex (in *O. warchalowskii* third elytral interval in apical part strongly convex, forms an obtuse costa).

DESCRIPTION

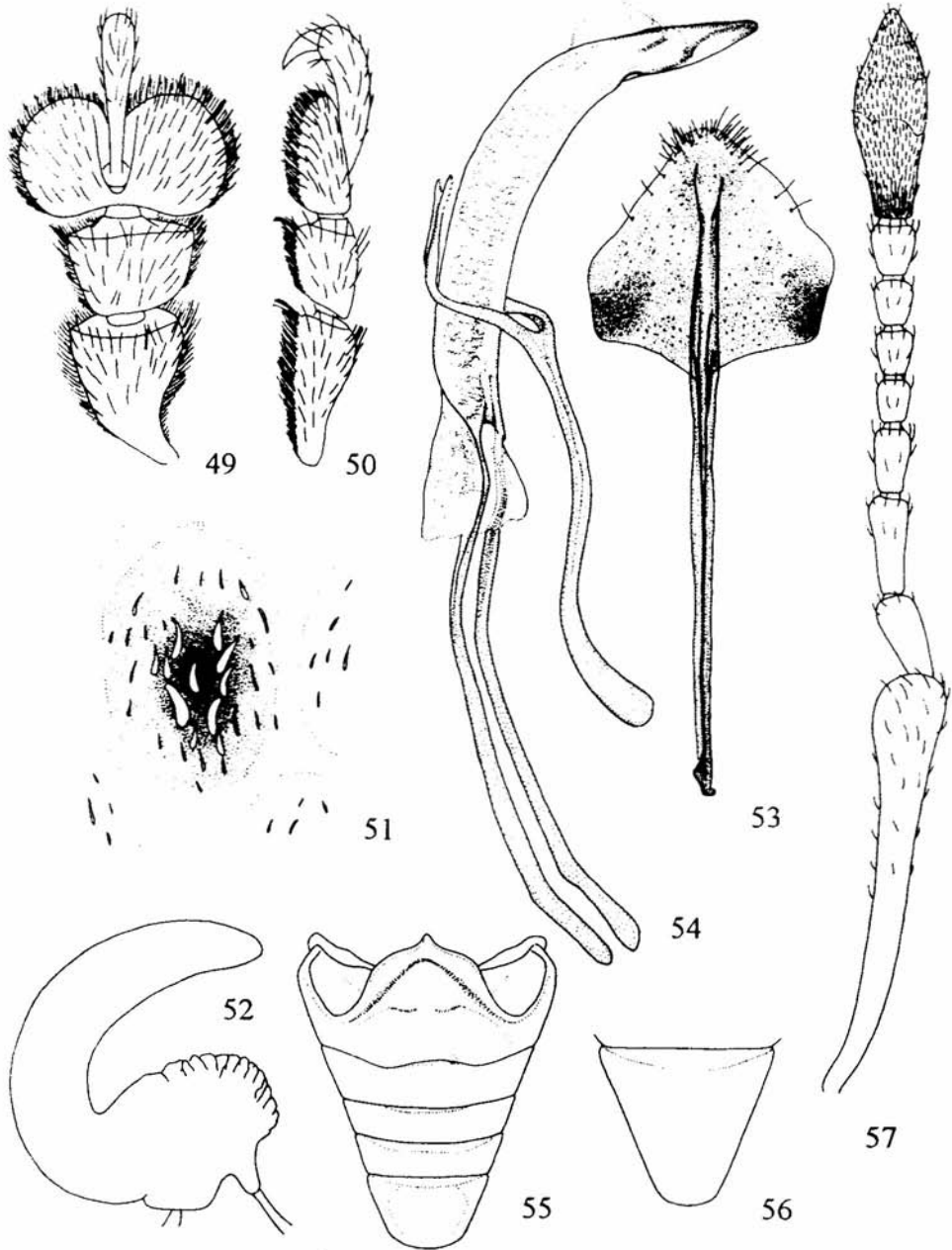
Length: 12.9-20.8 mm, width: 5.0-8.2 mm.

Body elongate (fig. 47, 48), black or brown, with microsculpture and fine irregular puncturation. Body surface with white, grey or transparent erect setiform scales and cream-colored, pearl or celadon adhering or erect scales. On head erect scales 6-7 times longer than wide, curved, sharp, cream-colored or light-brown, and adhering scales 3-4 times shorter than the erect scales, oval or setiform, celadon. Funicular joints and antennal club with white erect setae. Pronotum vestiture like on head, but also, especially in deep impression, with celadon, oval, adhering scales about twice shorter than the erect scales. Scutellum with long, erect, overlapping, pearl scales. Elytra with adhering scales in fovea, intervals of top of disc and sides bare or with few scales (fig. 51), in slope scales dense but not covering elytral surface. Femora in apical third with ring of oval celadon scales; similar, but often metallic green iridescent scales cover tibiae and the first tarsal segment, segments 2-4 with more elongate scales. Prosternal process with small, slightly erect scales. Pronotal epipleuron above coxal cavity with dense, lateral and distal margin of metasternum with extremely dense chalk-white scales.

Head separated from rostrum by deep V-shaped transverse furrow, the deepest on sides. Rostrum with five carinae; in the middle with smooth carina extending from transverse furrow and terminating anterior to the base of antennae. Paracentral carinae slightly higher than median one, diverging. Lateral carinae slightly lower than paracentral, reaching from base of rostrum to the middle. Frons with short, deep median row, vertex slightly convex. Frons along ventral margin of eyes strongly convex, forms a fold. Eyes regularly convex, large. Antennal scrobe visible from above, especially in anterior half, because ventral margin of the scrobe is sinuate and



47-48. *Ochtarthrum fossulatum*: 47 - body in dorsal view, 48 - body in lateral view



49-57. *Ochtarthrum fossulatum*: 49 - fore tarsus in dorsal view, 50 - fore tarsus in lateral view, 51 - foveae and scales of elytra, 52 - spermatheca, 53 - genital sclerite, 54 - male genitalia in lateral view, 55 - male abdominal sternites, 56 - V abdominal sternite in female, 57 - antenna

slightly convex. In lateral view antennal scrobe deep, in anterior half strongly curved ventrally, in posterior part moderately curved, slightly expanded. Upper margin of scrobe connected with transverse furrow. Rostrum in lateral view almost straight. Antennae long, scape slim, long, slightly curved, apex dilated. Segments 1 and 2 the longest, 3 slightly shorter, the remainder distinctly shorter (fig. 57).

Width/length ratio of pronotum 1.3, with maximum width in the middle, sides rounded, more converging anterad than posterad. In the middle of disc large impression (figs 47, 48), each corner of the impression with radial furrows, anterior more distinct than the posterior. Top of disc with median furrow interrupted by pronotal impression. Posterior half of the furrow with median carina. Anterior margin of pronotum straight, base bisinuate.

Scutellum pentagonal, slightly wider than long.

Elytra almost parallelsided, 1.7-1.8 times longer than wide, with maximum width in the middle. Surface foveolate, foveae extremely large, more or less hexagonal, arranged in irregular rows, intervals on top almost reduced, in slope as wide as 1/3-1/2 fovea diameter. Centre of each fovea with small setigerous puncture. In some specimens foveae have tendency to connect in pairs.

Abdominal sternites as in figs 55, 56.

Legs elongate. Fore tibiae slightly curved, apex dilated inwards and slightly outwards. Mid tibiae straight, hind tibiae curved with apex strongly dilated. Ventral margin of fore and mid tibiae with row of strong spines, hind tibiae without spines but with row of long setae. Corbels flat, completely covered by brown elongate scales. Tarsi broad, especially third segment, claw segment slim, about 1.8 times longer than third segment (figs 49, 50).

Genitalia as in figs 52-54.

DISTRIBUTION

Tanzania.

TYPE MATERIAL EXAMINED

Lectotype of *O. fossulatum*: male (present designation): "Ukani, STAUDINGER" [handwriting, black on white, and with male symbol]; "*fossulatum* FAUST" [handwriting, black on white]; [gold square]; "Type" [black on red]; "Coll. J. FAUST Ankauf 1900" [black on blue]; "Staatl. Museum für Tierkunde Dresden" [black on white]; (SMTD). Paralectotype female: labelled as lectotype, but without sex symbol (SMTD).

Type material of *Cychrotonus basilewskii*: Tanganyika Terr.: Bunduki, Uluguru Mts., 1500 m gorge Mungula 16-V-1957, Forêt, transition, dans l'humus, Mission Zoolog. I.R.S.A.C. en Afrique orientale (P. BASILEWSKY et N. LELEUP) 2, sex not examined (holotype and paratype) (MRAC); Tanganyika Terr.: Bunduki, Uluguru Mts. moy. Mgeta 1300 m, 30-IV\11-V-1957, 11, sex not examined (paratypes) (MRAC).

OTHER MATERIAL EXAMINED

Tanzania: Ukami, STAUDINGER, Coll. J. FAUST, 1 male (see note) (SMTD); Ukami, 1 female (IZPAS); . D. Ostafrika, STAUDINGER, Samml. K. F. HARTMANN, 1 female (SMTD).

NOTES

In the material examined there is a brown coloured specimen from Ukami (coll. FAUST) labelled "Type" but without gold square typical for FAUST's type specimens. In the original description only two specimens are recorded, both black coloured, collected by STAUDINGER. The brown specimen probably does not belong to the type series and was labelled afterwards as type by the curator of the collection.

Ochtarthrum warchalowskii sp. n.

(Figs. 58-65)

DIAGNOSIS

See diagnosis of *O. fossulatum*.

DESCRIPTION

Length: 15.9 mm, width: 7.1 mm.

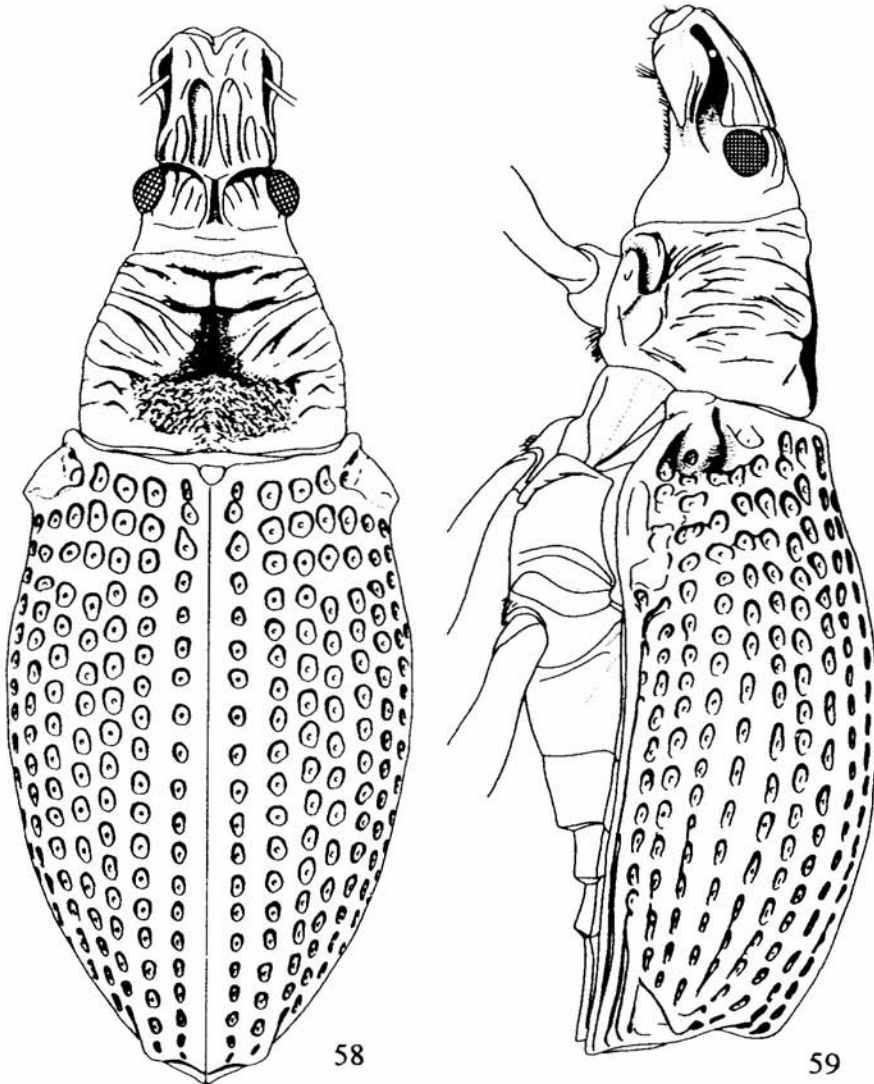
Body elongate (figs 58, 59), black. Head, pronotum and elytra with microsculpture. Deep impression on pronotum strongly and irregularly punctate, space between punctures with stronger microreticulation than on the rest of pronotum. In anterior half of elytral disc punctures of space between foveae umbilicate with radial rifts, in posterior half of disc space slightly irregular and finely umbilicate. Vestiture in the only known specimen almost invisible, probably strongly worn.

Head separated from rostrum by deep V-shaped transverse furrow, the deepest on sides, in the middle interrupted by median furrow (fig. 58). Transverse furrow before the median furrow curved posterad, forming a shallow furrow along the median furrow. Internal margin of the curved part of transverse furrow slightly elevated. Frons with median furrow, in anterior 2/3 length deep, in basal third shallow. Vertex convex. Frons along ventral margin of eye broadly elevated. Eyes smaller and less convex than in *O. fossulatum*. Antennal scrobe similar as in *O. fossulatum*. Median carina of rostrum in posterior half narrow and convex, on top smooth, on sides finely notched, in anterior half flattened. Paracental and lateral carinae less separated than in *O. fossulatum*, irregular, reaching half length of rostrum. Antennae long, scape curved, segments 1 and 2 the longest, segment 3 distinctly shorter than 1 and 2 and only slightly longer than the remaining ones (fig. 63).

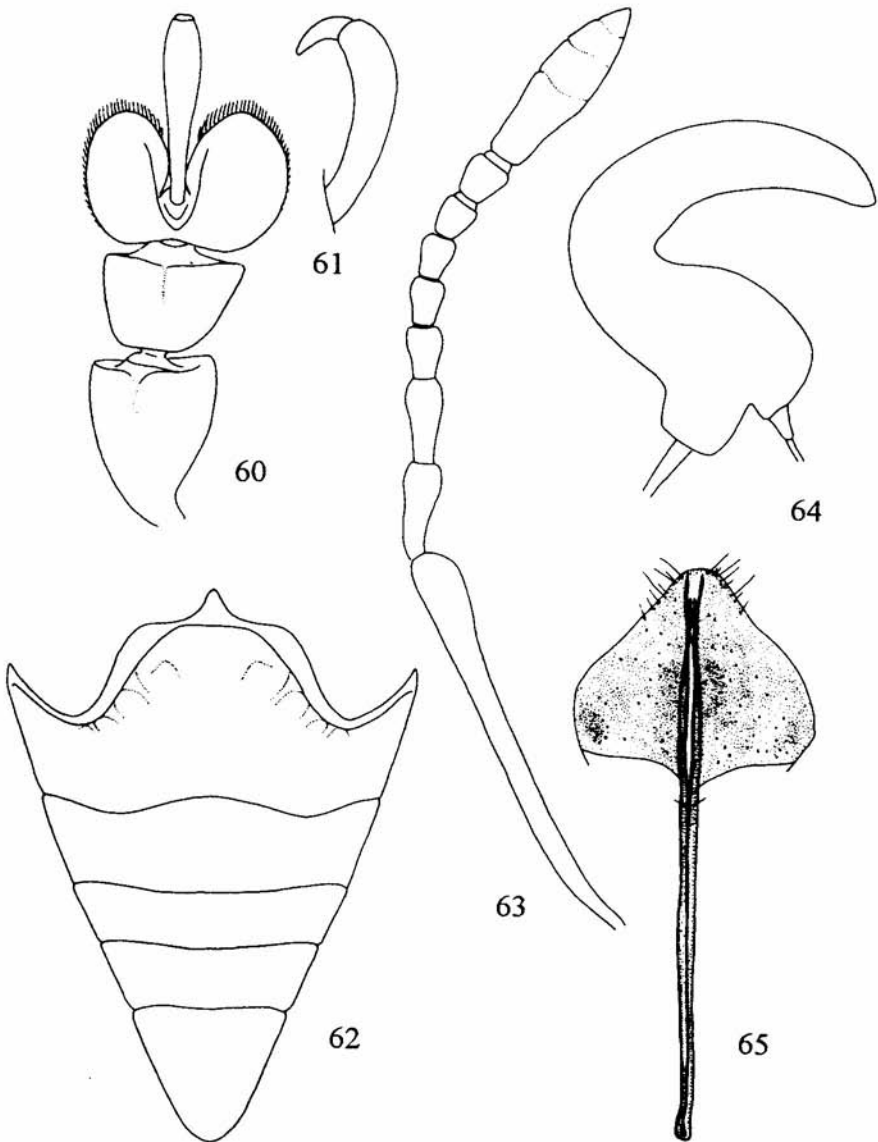
Pronotum 1.3 times wider than long, from the middle to anterior margin moderately narrowed, in basal half parallelsided. Anterior margin of pronotum in the middle shallowly emarginate, posterior margin only slightly bisinuate. Pronotal

disc in posterior half with broad, deep, semicircular impression, in anterior half with broad median furrow connected with posterior impression. Corners of the impression with radial furrows but less distinct than in *O. fossulatum*, so sides of disc are more regular, and outline less crenulate than in the preceding species (figs 58, 59).

Scutellum square with rounded posterior margin.



58, 59. *Ochtarthrum warchalowskii*: 58 - body in dorsal view, 59 - body in lateral view



60-65. *Ochtarthrum warchalowskii*: 60 - fore tarsus in dorsal view, 61 - claw segment in lateral view, 62 - abdominal sternites, 63 - antenna, 64 - spermatheca, 65 - genital sclerite

Elytra elongate-oval, 1.6 times longer than wide, with maximum width in 1/3 length, indistinctly narrowed to base and more narrowed to the apex. Foveae of disc round, smaller and shallower than in *O. fossulatum*. Distance between foveae in rows and between rows equal. Foveae never connected in two together. Third interval in slope strongly elevated, forms an obtuse costa (figs 58, 59).

Abdominal sternites as in fig. 62.

Legs similar as in *O. fossulatum* but slightly slimmer. Tarsi as in figs 60, 61.

Female genitalia as in figs 64, 65.

DISTRIBUTION

Tanzania.

TYPE MATERIAL EXAMINED

Holotype female: "D. Ost-Afrika, Ubena-Langenburg, Nördl. v. Nyassa-See, IV. 99, GÖTZE S." [black on blue] (ZMHU).

Etymology: It is dedicated to Prof. A. WARCHALOWSKI, my first teacher in entomology.

REFERENCES

- EMDEN, M. van, F. [I.] van EMDEN, 1936. Die Anordnung der *Brachyderinae*-Gattungen im Coleopterorum Catalogus. Stett. Ent. Zeit., **97**: 66-99, 211-239.
- EMDEN, M. van, F. [I.] van EMDEN, 1939. *Curculionidae: Brachyderinae* III. In: W. JUNK, S. SCHENKLING, Coleopterorum Catalogus, Pars 164: 197-327.
- EMDEN, F. I. van, 1944. A key to the genera of *Brachyderinae* of the world. Ann. Mag. Nat. Hist., Ser. 11, vol. XI: 503-532, 559-586.
- FAUST, J., 1890. Neue Rüsselkäfer aller Länder. Entomol. Zeit. Stett., **51**: 165-195.
- FAUST, J., 1896. Beitrag zur Kenntniss der Fauna von Deutsch-Ost-Afrika. Deutsche Entomol. Zeitschr., **1896**, Heft I: 113-146.
- FAUST, J., 1899. Neue Curculioniden aus Deutsch-Ost-Afrika. Deutsche Entomol. Zeitschr., **1899**, Heft. II: 321-344.
- HAAF, E., 1958. Über die Systematik, Verbreitung und Schädlichkeit der *Blosyrus*-Arten der aethiopischen und madagassischen Region (*Col. Curc.*). Ent. Arb. Mus. Frey, **9**, H. 3: 936-1067.
- HELLER, K. M., 1904. Beiträge zur Kenntnis der Insektenfauna von Kamerun. N:o 27. Rüsselkäfer aus Kamerun gesammelt von Prof. Dr Yngve SJÖSTEDT. Entomol. Tidskr., **25**: 161-201.
- HUSTACHE, A., 1918. Synopsis du genre *Stigmatrachelus* SCHÖNH. et autres genres Malgaches du même groupe [*Col. Curculionidae*]. Ann. Soc. Ent. France, (1917) **86**: 193-266.
- SCHALKWYK, H. A. D. van, 1968. A monograph of the genus *Protostrophus* MARSHALL (*Col. Curculionidae, Brachyderinae*). Entomology Mem. Dep. agric. tech. Serv. Repub. S. Afr., **15**: 1-173.
- SCHALKWYK, H. A. D. van, 1971. A synopsis of the species of *Proscaphaladeres* SCHÖNHERR (*Coleoptera: Curculionidae*). Entomology Mem. Dep. agric. tech. Serv. Repub. S. Afr., **22**: I-IV + 1-26.
- SCHALKWYK, H. A. D. van 1972. New species of the genera *Protostrophus* MARSHALL and *Proscaphaladeres* SCHÖNHERR (*Brachyderinae, Curculionidae, Coleoptera*). Entomology Mem. Dep. agric. tech. Serv. Repub. S. Afr., **25**: 1-13.
- VOSS, E., 1962. Mission zoologique de l'I.R.S.A.C. en Afrique orientale. (P. BASILEWSKY et N. LELEUP, 1957). LXXVIII. - *Coleoptera Curculionidae*. I. (171. Beitrag zur Kenntnis der Curculioniden). Ann. Mus. Roy. Afr. Centr. Serie in 8°, Zool., **110**: 271-336.

Elytra elongate-oval, 1.6 times longer than wide, with maximum width in 1/3 length, indistinctly narrowed to base and more narrowed to the apex. Foveae of disc round, smaller and shallower than in *O. fossulatum*. Distance between foveae in rows and between rows equal. Foveae never connected in two together. Third interval in slope strongly elevated, forms an obtuse costa (figs 58, 59).

Abdominal sternites as in fig. 62.

Legs similar as in *O. fossulatum* but slightly slimmer. Tarsi as in figs 60, 61.

Female genitalia as in figs 64, 65.

DISTRIBUTION

Tanzania.

TYPE MATERIAL EXAMINED

Holotype female: "D. Ost-Afrika, Ubena-Langenburg, Nördl. v. Nyassa-See, IV. 99, GÖTZE S." [black on blue] (ZMHU).

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- EMDEN, M. van, F. [I.] van EMDEN, 1939. *Curculionidae: Brachyderinae* III. In: W. JUNK, S. SCHENKLING, Coleopterorum Catalogus, Pars 164: 197-327.
- EMDEN, F. I. van, 1944. A key to the genera of *Brachyderinae* of the world. Ann. Mag. Nat. Hist., Ser. 11, vol. XI: 503-532, 559-586.
- FAUST, J., 1890. Neue Rüsselkäfer aller Länder. Entomol. Zeit. Stett., **51**: 165-195.
- FAUST, J., 1896. Beitrag zur Kenntniss der Fauna von Deutsch-Ost-Afrika. Deutsche Entomol. Zeitschr., **1896**, Heft I: 113-146.
- FAUST, J., 1899. Neue Curculioniden aus Deutsch-Ost-Afrika. Deutsche Entomol. Zetschr., **1899**, Heft. II: 321-344.
- HAAF, E., 1958. Über die Systematik, Verbreitung und Schädlichkeit der *Blosyrus*-Arten der aethiopischen und madagassischen Region (*Col. Curc.*). Ent. Arb. Mus. Frey, **9**, H. 3: 936-1067.
- HELLER, K. M., 1904. Beiträge zur Kenntnis der Insektenfauna von Kamerun. N:o 27. Rüsselkäfer aus Kamerun gesammelt von Prof. D:r Yngve SJÖSTEDT. Entomol. Tidskr., **25**: 161-201.
- HUSTACHE, A., 1918. Synopsis du genre *Stigmatrachelus* SCHÖNHERR et autres genres Malgaches du même groupe [*Col. Curculionidae*]. Ann. Soc. Ent. France, (1917) **86**: 193-266.
- SCHALKWYK, H. A. D. van, 1968. A monograph of the genus *Protostrophus* MARSHALL (*Col. Curculionidae, Brachyderinae*). Entomology Mem. Dep. agric. tech. Serv. Repub. S. Afr., **15**: 1-173.
- SCHALKWYK, H. A. D. van, 1971. A synopsis of the species of *Proscaphaladeres* SCHÖNHERR (*Coleoptera: Curculionidae*). Entomology Mem. Dep. agric. tech. Serv. Repub. S. Afr., **22**: 1-IV + 1-26.
- SCHALKWYK, H. A. D. van 1972. New species of the genera *Protostrophus* MARSHALL and *Proscaphaladeres* SCHÖNHERR (*Brachyderinae, Curculionidae, Coleoptera*). Entomology Mem. Dep. agric. tech. Serv. Repub. S. Afr., **25**: 1-13.
- VOSS, E., 1962. Mission zoologique de l'I.R.S.A.C. en Afrique orientale. (P. BASILEVSKY et N. LELEUP, 1957). LXXVIII. - *Coleoptera Curculionidae*. I. (171. Beitrag zur Kenntnis der Curculioniden). Ann. Mus. Roy. Afr. Centr. Serie in 8°, Zool., **110**: 271-336.