

OXYTELUS MEINANDERI SCHEERPELTZ, 1974 AND  
O. TUBERCULIFRONS EICHELBAUM, 1913, TWO AFROTROPICAL  
SPECIES WITH PROBLEMATIC TYPE MATERIAL  
(COLEOPTERA: STAPHYLINIDAE: OXYTELINAE)

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*Oxytelus meinanderi* Scheerpeltz, 1974 and *O. tuberculifrons* Eichelbaum, 1913 are identified as not based on proper type material. In the absence of information on the whereabouts of missing specimens and in lack of more material the available specimens are left 'as is', but they are fully illustrated to make these taxa recognizable. Habitus is depicted by colour habitus photographs, genitalia and terminalia by SEM images and line drawings.

Key words: Coleoptera, Staphylinidae, Oxytelinae, *Oxytelus meinanderi*, *O. tuberculifrons*, Afrotropical region, redescription.

## INTRODUCTION

In the course of an ongoing study of Afrotropical *Oxytelus* Gravenhorst, 1802 species a significant portion of relevant type material was checked in various museums in Europe and North America during the years 2001–2005. By priority, after removing homonymy (MAKRANCZY 2012) the investigations are now focused on the identities of the most poorly recognizable taxa. Two species, *Oxytelus meinanderi* Scheerpeltz, 1974 and *O. tuberculifrons* Eichelbaum, 1913 are identified as being problematic in terms of existence and status of their type materials. Since it was realized early on by the present author that even with the best intent and effort these taxa cannot be given the same kind of treatment the other species deserve but they have to be dealt with somehow, this is best done in a separate publication that precedes the others.

The genus *Oxytelus* has received surprisingly little attention during the last four decades, although in the period 1955–1975 was the most studied among the genera of Oxytelinae, not only in terms of new species descriptions but also revisionary attempts (with illustrations) and examination of type materials of the old names primarily by Gaston Fagel and Peter M. Hammond. At the time of this writing there are 223 *Oxytelus* species recognized worldwide (LÜ & ZHOU 2012). Current revisionary studies focus on the Southeast Asian fauna by Liang Lü (Beijing, China). This work is pioneering in presenting a methodology and illustration protocol that are in a large part followed by the present writer, to ensure comparability of the species in the different regions.

In order to emphasize this attempt, the verbal descriptions are here annotated by the acronyms from the aforementioned publication.

To the knowledge of the present writer, besides the two species hereby treated all other Afrotropical *Oxytelus* species have their original type material preserved in public museums in reasonably good shape. For *O. tuberculifrons* there is no more material available at this time. There aren't many recent collections from East Africa, and those few that are known to be available have been examined. *O. meinanderi* was named from an area where very little collecting has ever been made and this situation is unlikely to change in the near future.

## MATERIAL AND METHODS

The hereby treated material belongs to the Field Museum of Natural History, Chicago, IL, USA (FMNH) and the Naturhistorisches Museum Wien, Austria (NHMW). Specimens were only supplied with an identification label by the present author.

For descriptions and measurements a Leica MZ 12.5 stereoscopic microscope was used, in the descriptive text the terminology established by LÜ and ZHOU (2012) is incorporated, terms annotated by their abbreviations. For the line drawings permanent preparations were made in Euparal mounting medium on plastic cards pinned with the specimens. The genital preparation techniques are detailed in MAKRANCZY (2006). Drawing was done with a Jenalab (Carl Zeiss, Jena) compound microscope and attached drawing tube (camera lucida). SEM images were taken of uncoated specimens with either a Hitachi S-2600 N or a Zeiss EVO LS15 scanning electron microscope. For colour habitus photography a Nikon D4 camera with Mitutoyo Plan Apo 10× ELDW or Rodenstock Apo-Rodagon N 50/2.8 lens were used and layers montaged with ZereneStacker.

Measurements are defined as follows: HW = head width with eyes; TW = head width at temples; PW = maximum width of pronotum; SW = approximate width of shoulders; AW = maximum width of abdomen; HL = head length at the middle-line from front margin of clypeus to the beginning of neck; EL = eye length; TL = length of temple; PL = length of pronotum at the middle-line; SL = length of elytra from shoulder; SC = length of elytra from hind apex of scutellum; FB = forebody length (combined length of head, pronotum and elytra); BL = approximate body length. All measured from dorsal view.

The label data are cited verbatim for all specimens between “ ”, the symbol “\” is a separator between each individual label, while “;” means line breaks. Text within brackets [ ] is explanatory and was not included in the original labels.

## TAXONOMY

### *Oxytelus meinanderi* SCHEERPELTZ, 1974 (Figs 1–3, 6–7, 10–13, 18–22)

*Oxytelus (Anotylus) meinanderi* SCHEERPELTZ, 1974: 7.

*Oxytelus meinanderi*; HERMAN, 2001: 1442.

Material examined – “♂ \ Sudan; Erkowit [18°46'N, 37°70'E] \ 18.4.1964; M. Meinander \ *Oxytelus*; Meinanderi; n. sp. \ Typus; *Oxytelus*; Meinanderi; O. Scheerpeltz [dark

red card] \ ex coll.; Scheerpeltz [light blue label] \ Meinanderi; Schp. [light blue bottom card] \ Oxytelus; meinanderi Scheerpeltz; det. Makranczy, 2013" (major ♂ without abdomen, NHMW); "♂ \ Sudan; Erkowit \ 18.4.1964; M. Meinander \ Cotypus; Oxytelus; Meinanderi; O. Scheerpeltz [pink card] \ ex coll.; Scheerpeltz [blue label] \ Oxytelus; meinanderi Scheerpeltz; det. Makranczy, 2013" (minor ♂, NHMW); "♀ \ Sudan; Erkowit \ 18.4.1964; M. Meinander \ Oxytelus; Meinanderi; n. sp. \ Typus; Oxytelus; Meinanderi; O. Scheerpeltz [dark red card] \ ex coll.; Scheerpeltz [blue label] \ Oxytelus; meinanderi Scheerpeltz; det. Makranczy, 2013" (1 ♀, NHMW).

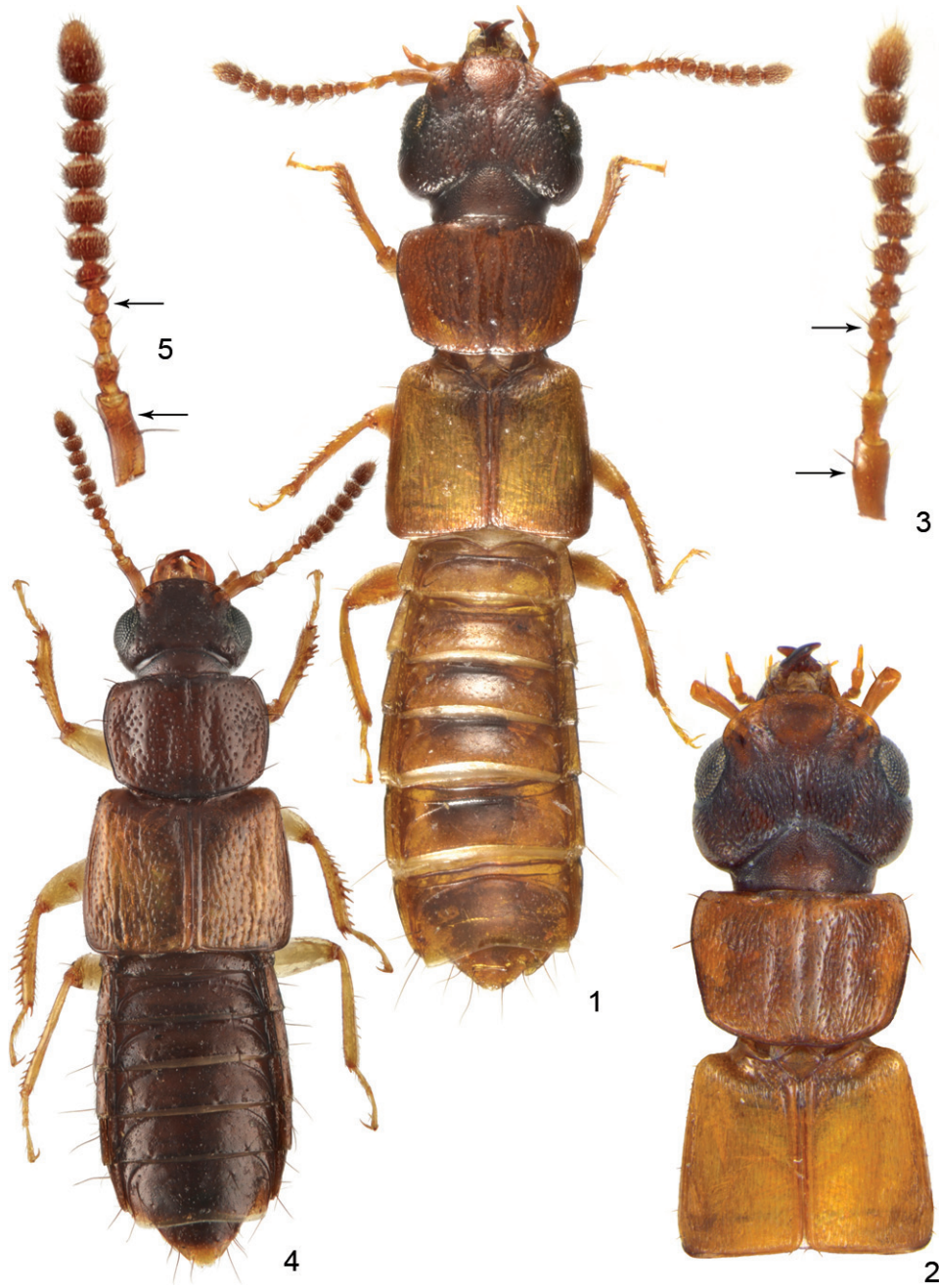
Redescription – Measurements (in mm, ♂): HW = 0.97; TW = 1.00; PW = 1.00; SW = 0.94; AW = 1.00; HL = 0.61; EL = 0.28; TL = 0.31; PL = 0.73; SL = 0.90; SC = 0.82; FB = 2.53; BL = 4.83; (♀): HW = 0.76; TW = 0.73; PW = 0.82; SW = 0.82; AW = 0.95; HL = 0.50; EL = 0.26; TL = 0.22; PL = 0.63; SL = 0.81; SC = 0.73; FB = 2.13; BL = 4.53. Body moderately lustrous, mostly testaceous, reddish with darker head and elytra yellowish. Head reddish dark brown, supra-antennal ridges and clypeus somewhat lighter, pronotum reddish medium brown, elytra yellowish medium brown, rest of body medium brown. With a few stronger setae not differing markedly from body colour.

Male (Fig. 1). Head surface dominated by strong and dense punctation intermixed with costate microsculpture (sometimes with rugulose parts), with only the elevated parts of supraantennal tubercles and most of clypeus free of it: these with colliculate microsculpture. Clypeus side and indistinct posterior borders form an almost perfect circle marked by darker colour. A more or less longitudinal line connecting upper/posterior edge of eye with the neck. Anterior margins of supraantennal ridges straight and oblique, meeting straight anterior edge with two tiny, shallow incisions. Vertex with conspicuous midlongitudinal suture connecting tip of reverse V-shaped occipital suture (os) with impressed V-shaped area behind clypeus; latter transversally impressed on anterior part. Nuchal ridge (nr) inconspicuous, slightly darker, paralateral sutures (ps) absent. Antenna of type II: antennomere 4 with basal dish (Fig. 3); first antennomere insignificantly twitched.

Pronotum 3-sulcate, median sulcus (ms) and paramedial sulcus (pms) medium strongly impressed, the latter wider, paralateral depressions (pld) medium strongly depressed along a curved, oblique line, lateral marginal bead (lmb) apparent on posterior and side margins, marked by a dark brown line. Surface only moderately glabrous with costate microsculpture, more shiny on elevated areas, in sulci and depressions with rough and irregular microsculpture.

Elytra moderately glabrous, dominated by medium coarse costate microsculpture, in the outer 1/3 a few thin but slightly elevated thread-like costae. Epipleural ridge (er) present, continues dorsally in a posterior marginal bead, stronger in outer half, membranous lobe apparent in outer half pulled out at 3/5 width from suture. Lateral longitudinal ridge (llr) apparent and marked by a slightly darker line.

Legs with three-segmented tarsi (tarsal formula 3–3–3) with second article just a little shorter than first, third elongate but not flattened. Tibiae with rows of spinules and more acute, darker spines mostly along two longitudinal keels. Protibia distinctly constricted in outer 1/4, the double row consists of some 5 and 6 spines, interrupted at pre-apical emargination. Mesotibia slightly emarginate in outer 1/4, double row consisting of some 5 and 9 spines, interrupted pre-apically. Metatibia with two longitudinal keels, row of some 7 smaller spines on one while the other bears a longitudinal ctenidium of spinules in outer 3/5 of tibial length. All tibiae with a distinct spur at 2/5 of length.



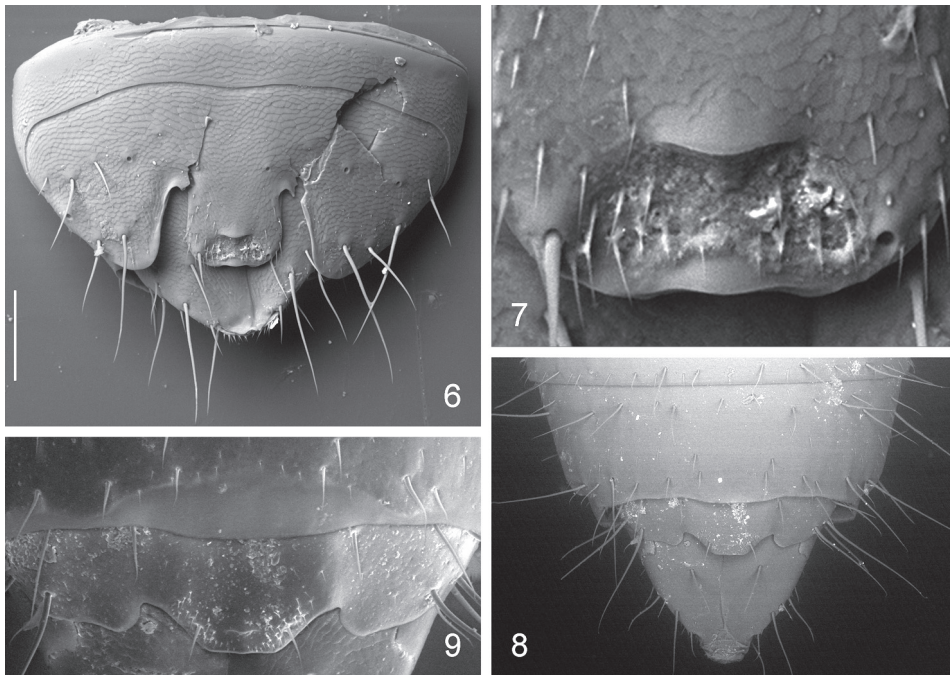
**Figs 1–5.** 1–3 = *Oxytelus meinanderi* Scheerpeltz, 1974. 1 = male habitus, 2 = major male forebody, 3 = antenna. 4–5 = *O. tuberculifrons* Eichelbaum, 1913. 4 = female habitus, 5 = antenna.

Abdomen not pubescent (except sparse spurs), somewhat constricted at base but rather parallel-sided, tergites with very fine coriaceous microsculpture of isodiametric cells.

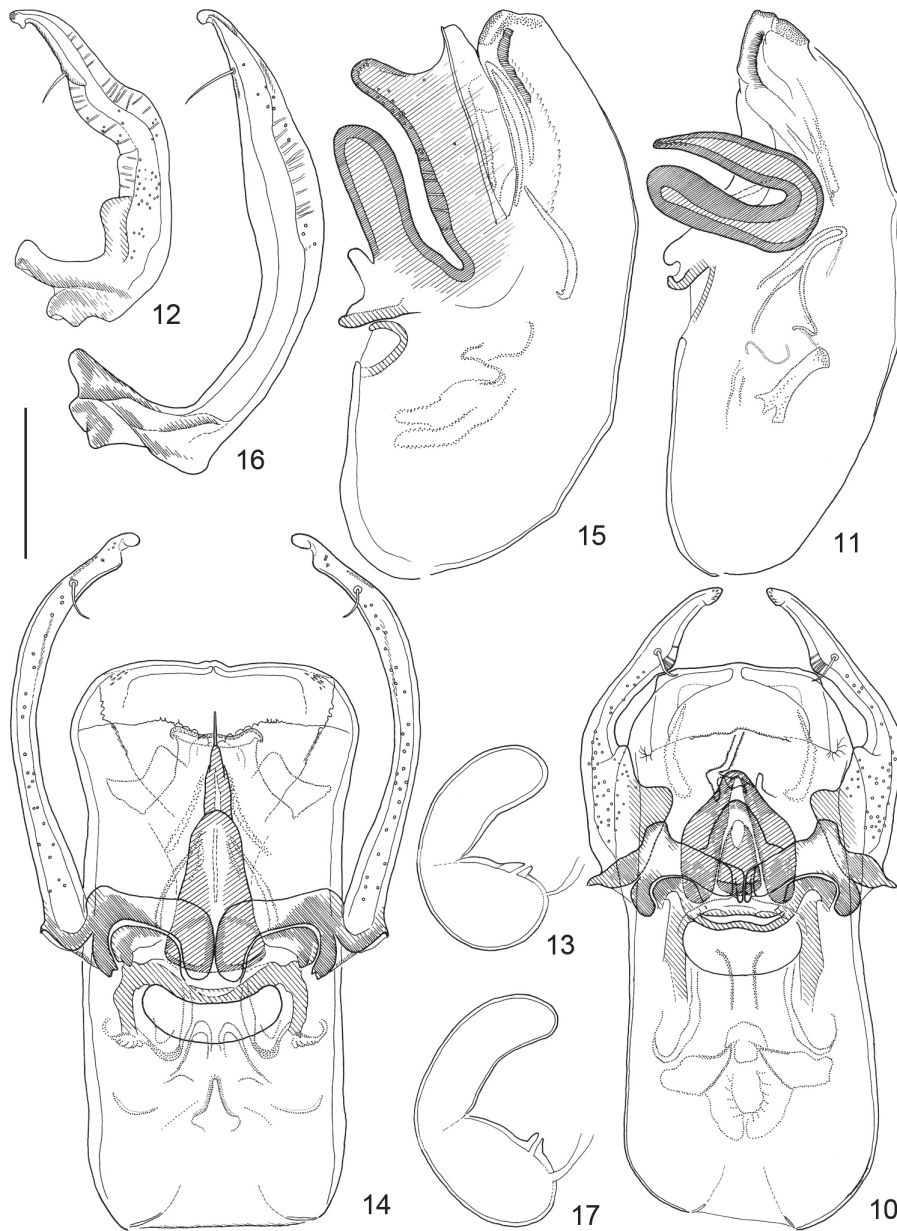
Primary and secondary sexual characters. Male temples rather enlarged and broadened, strongly developed specimen as on Fig. 2. Female temples much shorter, not exceeding half the length of the eye, their width less than head width at eye. Male sternite VII (Fig. 18) with posterior margin very gently sinuate in middle without other peculiar modifications. Male sternite VIII (Fig. 19) with basal ridge (br) more or less straight and thin, subbasal ridge (sbr) gently produced (anteriorly incurved) in middle, these of the same formation in females (Fig. 21). Male sternite VIII (Fig. 6) with apical median plate (Fig. 7) fully developed, bordering incisions with length 1/3 of total plate length, transverse carina (tc) present, mid-longitudinal internal ridge (mlir) like a closed ring, rather elongate, about 1/4 of plate length. Male tergite X as on Fig. 20, female tergite X as on Fig. 22. Aedeagus as on Figs 10-12, spermatheca (Fig. 13) hook-like, rightly angulate in middle, basal portion (bsp) bulbous, apical portion (app) slightly curved.

Distribution – The hereby mentioned locality in Sudan is the only known record.

Remarks – SCHEERPELTZ (1974) lists 1 male holotypus, 1 female allotypus, 1 male paratypus, 1 female paratypus and a further male paratypus with



**Figs 6–9.** 6–7 = *Oxytelus meinanderi* Scheerpeltz, 1974. 6 = male sternite VIII, 7 = apical median plate of the same. 8–9 = *O. tuberculifrons* Eichelbaum, 1913. 8 = abdominal apex of male, ventral view, 9 = median apex of male sternite VII. Scales: 0.04 mm for Fig. 7, 0.1 mm for Fig. 9, 0.2 mm for Figs 6, 8.



**Figs 10–17.** 10–13 = *Oxytelus meinanderi* Scheerpeltz, 1974. 10 = aedeagus, frontal view, 11 = median lobe, side view, 12 = paramere, side view, 13 = spermatheca. 14–17 = *O. tuberculifrons* Eichelbaum, 1913. 14 = aedeagus, frontal view, 15 = median lobe, side view, 16 = paramere, side view, 17 = spermatheca. Scales: 0.1 mm for Figs 13, 17, 0.12 mm for Figs 14–16, 0.15 mm for Figs 10–12.

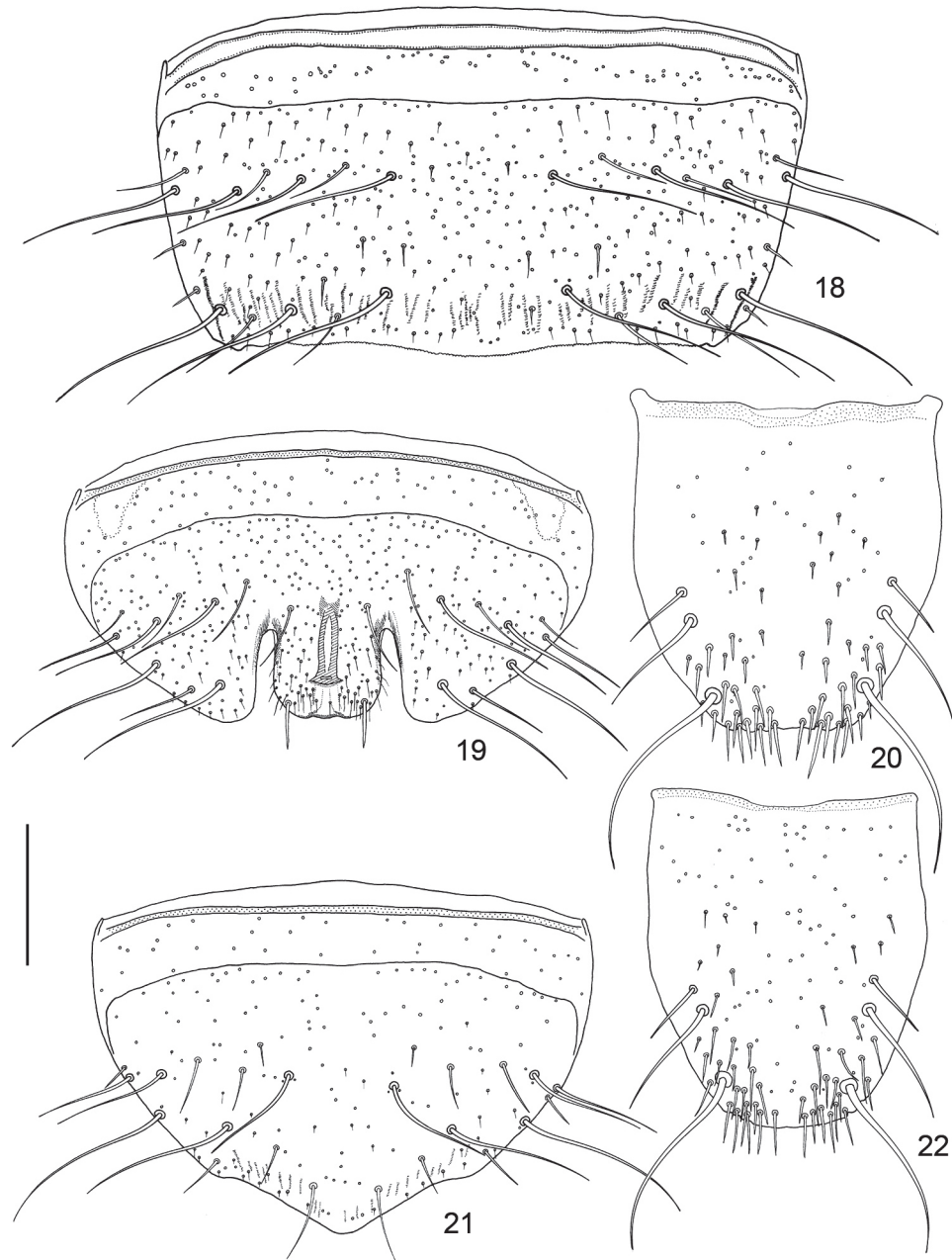
slightly different data: "Sudan, Erkowit, 19.IV.1964, leg. J. Kaisila" as type material. It is clear from the labelling that the only complete (minor) male was not meant to be the holotype; it could have been the major male that is now without abdomen (when still intact), but there is a further male indicated in the description as well as another female, their whereabouts or fate unknown. Treating the incomplete major male as holotype has to be done with caution as Scheerpeltz was known to give false information in some of his papers and in a great many of cases labelled type specimens very confusingly, so it cannot be taken for granted that one of the missing specimens is not in fact the holotype. The present author has recently dealt with type material from the same publication and it appeared there (MAKRANCZY 2013) that the primary type specimen indicated to be in Helsinki was simply not sent there although it is stated to be in the collection according to the list of SILFVERBERG (1988). The situation with the type material of *O. meinanderi* seems to be different as two of the originally listed specimens appear to be absent – could be either sent and lost or misplaced in Helsinki (Muona, pers. comm.), but there is still chance that the missing material eventually turns up somewhere, either in Wien or Helsinki. In the present situation – pending further information – the type material surviving in NHMW is best left 'as is'. The major and minor males do not differ in their morphology significantly, only in their sizes.

*Oxytelus tuberculifrons* Eichelbaum, 1913  
(Figs 4–5, 8–9, 14–17, 23–27)

*Oxytelus tuberculifrons* EICHELBAUM, 1913: 118.  
*Oxytelus tuberculifrons*; HERMAN, 1970: 411.  
*Oxytelus tuberculifrons*; HERMAN, 2001: 1461.

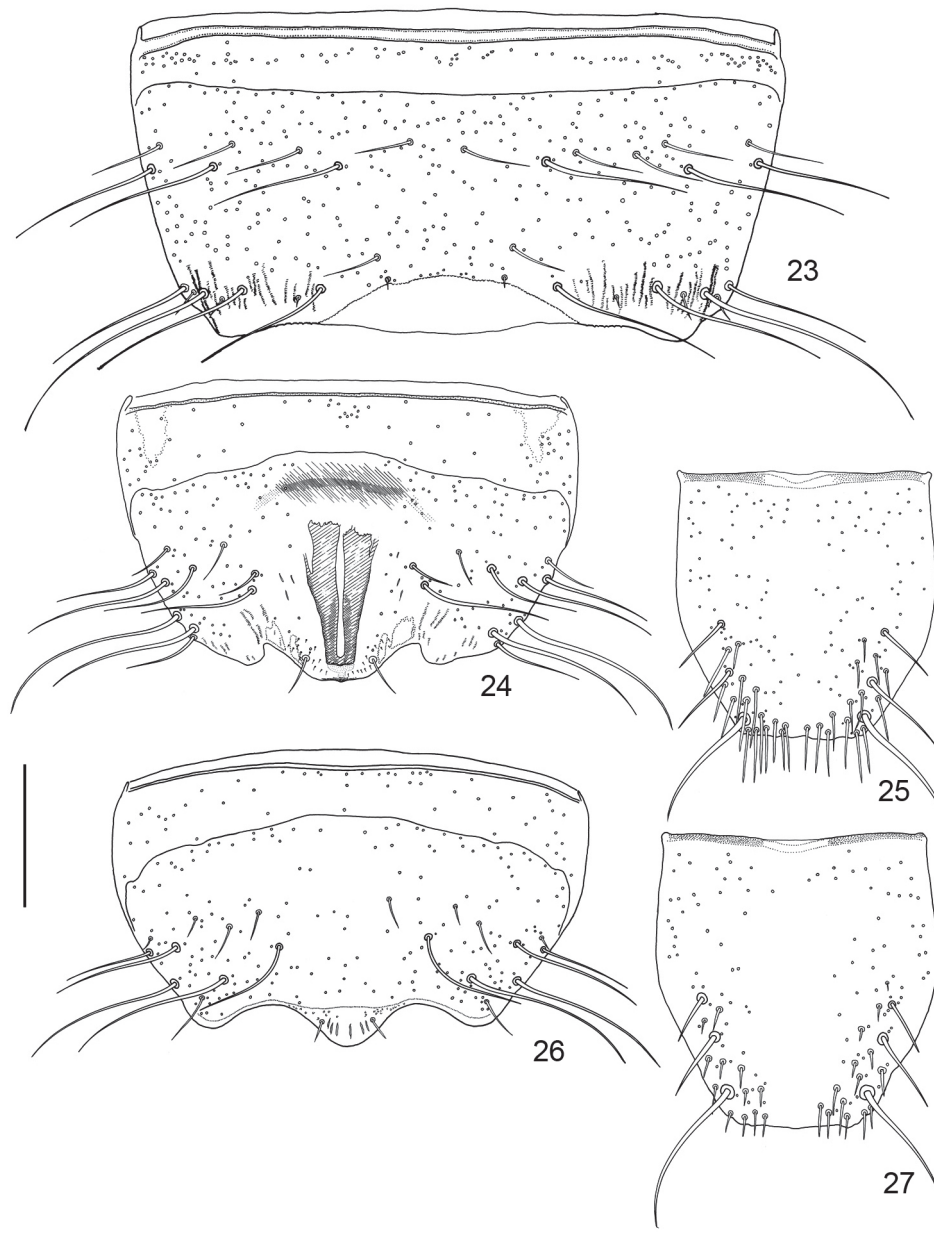
Material examined – "N.W. Usagara; lg. Methner. \ ♀ \ Chicago NHMus; M. Bernhauer; Collection \ Oxytelus; tuberculifrons; Eichelbaum \ Oxytelus; tuberculifrons Eichelbaum; det. Makranczy, 2013" (1 ♀, FMNH); "N.W. Usagara; 1700-1900 m.; 15.II.1912 \ ♂ \ D. Ostafrika; Daressalam; Methner \ fortior Brh.; Typ. \ tuberculifrons; det. Bernhau[er]; Eich.? \ Chicago NHMus; M. Bernhauer; Collection \ Oxytelus; tuberculifrons Eichelbaum; det. Makranczy, 2013" (1 ♂ without head and pronotum, FMNH).

Redescription – Measurements (in mm, ♀): HW = 0.65; TW = 0.62; PW = 0.79; SW = 0.85; AW = 0.93; HL = 0.38; EL = 0.22; TL = 0.09; PL = 0.59; SL = 0.76; SC = 0.66; FB = 1.80; BL = 3.30. Body rather lustrous, generally testaceous with a few conspicuous dark brown setae: head dark brown with reddish tint, supra-antennal tubercles lighter, pronotum reddish medium to dark brown, deflexed lateral margin darker, blackish, elytra somewhat lighter, yellowish medium brown, slightly transparent, outer posterior corners sometimes with slight opaque spots, scutellar area to the shoulders slightly darker, infusate. Abdomen dark brown with reddish tint, tarsi, tibiae and apices of femora medium to light brown,



**Figs 18–22.** *Oxytelus meinanderi* Scheerpeltz, 1974. 18 = male sternite VII, 19 = male sternite VIII, 20 = male tergite X, 21 = female sternite VIII, 22 = female tergite X. Scales: 0.09 mm for Fig. 22, 0.10 mm for Fig. 20, 0.20 mm for Figs 18, 21, 0.24 mm for Fig. 19.





**Figs 23–27.** *Oxytelus tuberculifrons* Eichelbaum, 1913. 23 = male sternite VII, 24 = male sternite VIII, 25 = male tergite X, 26 = female sternite VIII, 27 = female tergite X. Scales: 0.09 mm for Fig. 27, 0.10 mm for Fig. 25, 0.20 mm for Figs 23, 26, 0.24 mm for Fig. 24.

outer part of coxae, femora except the apex much lighter, whitish-yellowish, antennae and mouthparts reddish medium brown.

Female (Fig. 4). Head glabrous, sparsely punctate, punctures more or less arranged in longitudinal rows. Clypeus side and indistinct posterior borders form an almost perfect circle marked by darker colour, epistomal suture incomplete posteriorly. Anterior margins of supra-antennal ridges straight and oblique, meeting straight anterior edge with two tiny, shallow incisions. Vertex more or less flat with just a trace of depression in the middle, clypeus transversally impressed on anterior part. Occipital suture (os) deep but more narrow in middle, nuchal ridge (nr) only in traces, marked by slightly darker line. Paralateral sutures (ps) and midlongitudinal suture absent. Antenna of type I: antennomere 4 subglobose, without basal dish (Fig. 5); first antennomere slightly twitched, fifth article of transverse oval-discoid shape.

Pronotum 3-sulcate, median sulcus (ms) and paramedial sulcus (pms) gently impressed, the latter wider, paralateral depressions (pld) slightly depressed along a curved, oblique line, lateral marginal bead (lmb) apparent on posterior and side margins, marked by a blackish line, pronotum infusate on extreme posterior part next to it. Surface glabrous with variously sized punctures, latter more dense in sulci than on elevated areas.

Elytra glabrous, but with variously sized punctures, the large punctures somewhat arranged into longitudinal lines, in outer 1/3 a few longitudinal ridges (uninterrupted by punctures) are obvious. Some of the punctures appear confluent. Epipleural ridge (er) present, continues dorsally in a posterior marginal bead, thin but apparent on whole width, membranous lobe apparent in outer half pulled out at 3/5 width from suture, lateral longitudinal ridge (llr) apparent and marked by a slightly darker line.

Legs with three-segmented tarsi (tarsal formula 3–3–3) with first article much longer than second, almost as long as the very elongate third, none flattened. Tibiae with rows of spinules and blunt, darker spines mostly along two longitudinal keels. Protibia distinctly constricted in outer 1/3, the double row of consists of some 4 and 5 spines, interrupted at pre-apical emargination. Mesotibia slightly emarginate in outer 1/3, double row consists of some 5 and 9 spines, interrupted pre-apically. Metatibia with two longitudinal keels, row of some 6–7 smaller spines on one while the other bears a longitudinal ctenidium of spinules in outer 3/5 of tibial length. All tibiae with a distinct spur at 2/5 of length.

Abdomen not pubescent (except sparse spurs), broadest at 5th and 6th segment, tergites with very fine coriaceous microsculpture of slightly transverse cells.

Primary and secondary sexual characters. Male head and pronotum unknown. Male sternite VII (Fig. 23) with posterior margin more or less straight but the more sclerotized plate broadly produced in middle, thereby surrounding a membranous portion in a segmental arch (Fig. 9). Male sternite VIII (Fig. 24) with basal ridge (br) more or less straight and thin, subbasal ridge (sbr) very gently sinuate (posteriorly outcurved) in middle, these of the same formation in females (Fig. 26). Male sternite VIII with apical median plate not so distinct (on Fig. 8), but a transverse carina (tc) present, mid-longitudinal internal ridge (mlir) U-shaped, arms rather extended, but strongly sclerotized part only 1/4 of sternite length. Male tergite X as on Fig. 25, female tergite X as on Fig. 27. Aedeagus as on Figs 14–16, spermatheca (Fig. 17) hook-like, basal portion (bsp) bulbous, apical portion (app) slightly curved.

Distribution – The original type locality is “Amani” (nature reserve) [a once popular German resort, Tanga region, Tanzania, 5°05'S, 58°40'E], but here also recorded from “NW Usagara (Ost-Usambara)” [=Misungwi district, Mwanza region, Tanzania, 2°55'S, 32°50'E].

Remarks – The collection of Felix Eichelbaum is known to have perished in the bombing of Hamburg during WWII. In the knowledge of the overwhelming diversity of *Oxytelus* in the Afrotropics a missing original type material instantly places the respective taxon on the shortlist for a taxonomic revision. Of all the species Eichelbaum originally named in *Oxytelus*, only *O. tuberculifrons* belongs in this genus according to the current generic concept. The description is stated to be based on one female, with its loss there is no possibly surviving type material to search for. Although it is not documented or suggested anywhere in the literature that Max Bernhauer, the Austrian titan of Staphylinidae taxonomy of the time have examined Eichelbaum's material, it is without question that he assembled the most significant collection of Staphylinidae in the first half of the XXth Century. Bernhauer's collection is preserved in the Field Museum of Natural History (FMNH) to where it was sold after his death. In it remained one female specimen of *Oxytelus* identified as *O. tuberculifrons*, and an incomplete male marked as '*Oxytelus fortior*', an unpublished name. This second specimen is missing the head and pronotum but besides coming from the same locality as the aforementioned female bears a later determination label by Bernhauer as *O. tuberculifrons*. There is little doubt that the two specimens belong to the same species. As this material appears to be the only authentic one, the name *O. tuberculifrons* is here interpreted based on these two exemplars, but for obvious reasons a neotype designation for the only complete specimen, a female, is undesirable; this is best done when an intact male specimen becomes available. The taxon has not received any taxonomic treatment since its description. Subsequent studies within the Afrotropics did not mention this species. The original description offers little information of diagnostic value, but the statements there have no significant contradiction with the features of the female specimen.

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