

Histeridae of Socotra (Coleoptera: Histeroidea)

Tomáš LACKNER¹⁾ & Pierpaolo VIENNA²⁾

¹⁾Bavarian State Collection of Zoology, Münchhausenstraße 21, 81247 Munich, Germany;
e-mail: tomaslackner@me.com

²⁾Via J. Diedo 6/A, 30126 Venezia, Italy; e-mail: p.vien@libero.it

Abstract. The histerid beetles (Coleoptera: Histeridae) of Socotra Island (Yemen) are reviewed based on the material collected during the Czech expeditions undertaken between 2000 and 2012. A total of 20 species are recorded, three of which are described herein: *Pachycraerus socotrensis* sp. nov., *Liopygus occidentalis* sp. nov., and *Teretrius* (*Neoteretrius*) *dispar* sp. nov. *Hypocaccus virescens* Théron, 1963 is transferred from the subgenus *Baeckmanniolus* Reichardt, 1926 to *Hypocaccus* s. str. Thomson, 1867 based on external morphology. Most taxa, albeit determined only up to their (sub)generic rank, are recorded from Socotra for the first time. Due to poor understanding of their taxonomy, or lack of determination keys to the following (sub)genera: *Tribalus* Erichson, 1834, *Plegaderus* (*Plegaderus*) Erichson, 1834, *Acritus* (*Acritus*) LeConte, 1853, and *Teretrius* (*Teretrius*) Erichson, 1834, their representatives from Socotra are left without identification pending revisions. The Socotran histerid fauna has been found to consist mainly of widely distributed African, Arabian/Near Eastern taxa, as well as local endemics. The occurrence of the (predominantly Holarctic) genus *Plegaderus* and the exclusively southeast Asian genus *Liopygus* Lewis, 1891 in Socotra is highly interesting.

Key words. Coleoptera, Histeridae, new species, new records, Socotra, Yemen

Introduction

The fauna of histerid beetles of the Arabian Peninsula has been studied in detail in the past sixty to ten years (e.g. MÜLLER 1954, KRYZHANOVSKIJ 1979, MAZUR 1994, KANAAR 2008), with the efforts culminating in the publication of a comprehensive catalogue of the local histerid fauna by PENATI & VIENNA (2006). Regarding the fauna of the Socotra Archipelago,

which is known to harbour high proportion of endemic flora and fauna (including insects), there have been only scant published records: several histerids were mentioned in the works of TASCHENBERG (1883), GAHAN (1903), WRANIK (2003), and THÉRY et al. (2009). LACKNER & KAPLER (2007) described the first Socotran endemic, *Eutriptus jirinae*. BATELKA (2012) published an interesting and highly readable summary of the geological history, climate and biodiversity of the Socotra Archipelago. Socotra Archipelago has not been subjected to many recent entomological surveys and that is the main reason why there have not been more published records, especially on the Histeridae. However, a recent series of expeditions of (chiefly) Czech entomologists undertaken between 2000–2012 have yielded several interesting histerid beetles, and their detailed account is given below.

Material and methods

All dry-mounted specimens were relaxed in warm water for several hours. After removal from original cards, beetles were side-mounted on triangular points and examined under Nikon 102 binocular microscope with diffuse light. Male genitalia were first macerated in 10% KOH solution for about 3 hours, cleared in 80% alcohol and macerated in lactic acid with fuchsine, incubated at 60°C for another 30 minutes, and subsequently cleared in 80% ethanol, and transferred and then observed in α -terpineol in a small dish.

Digital photographs of male genitalia were taken by a Nikon 4500 Coolpix camera and edited in Adobe Photoshop CS5. SEM micrographs were taken at the Laboratory of the Electron Microscopy at the Faculty of Science, Charles University, Prague, Czech Republic. Habitus photographs were made by F. Slamka (Bratislava, Slovakia). Figures were drawn based on the photographs or direct observations, using a Hakuba klv-7000 light box. All specimens were measured with an ocular micrometer. Body part terminology follows that of ÔHARA (1994) and LACKNER (2010).

BEZDĚK et al. (2012) summarised “Socotran geographical names used in entomological literature”, including their visualisation on maps; we refer our readers to that paper for the geographic distribution of species presented here on the island.

Exact label data are cited and given in quotation marks for the type material. Authors’ additional remarks are provided in square brackets. Separate label lines are indicated by a slash (/).

The specimens examined for this study are deposited in the following collections:

- NMPC Národní muzeum, Prague, Czech Republic (J. Hájek);
- PVCV Pierpaolo Vienna private collection, Venice, Italy;
- TLCM Tomáš Lackner private collection, Munich, Germany.

Abbreviations of morphological measurements follow ÔHARA (1994) and are used throughout the text as follows:

- APW width between anterior angles of pronotum;
- EL length of elytron along elytral suture;
- EW maximum width between outer margins of elytra;
- PEL length between anterior angles of pronotum and apices of elytra;
- PPW width between posterior angles of pronotum.

Taxonomy

Tribalinae

Tribalus (Tribalus) sp.

Material examined. YEMEN: SOCOTRA: 1 ♂ and 1 unsexed spec., Kazazhan area, shrubland on limestone, sifting, 12°33.8'N, 54°19.8'E, 540 m, 10.vi.2012, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (NMPC).

Comments. Subgenus *Tribalus* s. str. of the genus *Tribalus* Erichson, 1834, with 65 described species is a species-rich genus with bulk of its representatives occurring in Africa, while a smaller number of taxa are present in the Palaearctic and Oriental realms (MAZUR 2011). Its representatives are found mostly under stones in wetter areas near streams, occasionally they are collected by sifting forest detritus as well. The subgenus contains numerous undescribed species; furthermore, its representatives are rather uniform in general outlook and the most reliable taxonomic characters are found on the male genitalia (T. Lackner, unpublished data). Due to these factors as well as absence of any contemporary or reliable identification keys, we were unable to determine its exact taxonomic identity and we advocate its revision. New taxon for the Socotra archipelago.

Histerinae: Exosternini

Pachyraerus socotrensis sp. nov.

(Figs 1–13)

Type material. HOLOTYPE: ♂, side-mounted on a triangular mounting card, genitalia extracted, dismembered and glued to the same mounting card as the specimen, with the following labels: 'YEMEN SOCOTRA / wadi Ayhaft / 12°36.5'N, 53°58.9'E / 200 m, 7-8.xi.2010 / P. Hlaváč lgt. [printed]'; followed by: 'Pachyraerus / socotrensis / sp.nov. / HOLOTYPE / det. T. Lackner & / P. Vienna 2017 [red label, handwritten]' (NMPC). ALLOTYPE: ♀, side-mounted on a triangular mounting card, genitalia extracted, dismembered and glued to the same mounting card as the specimen, with labels identical to those of the holotype (NMPC). PARATYPES: **YEMEN: SOCOTRA:** 1 ♂ 2 ♀♀ and 3 unsexed spec., with labels identical to those of the holotype (2 spec. in PVCV; 1 ♂ 2 ♀♀ and 1 spec. in TLCLM); 1 ♂ 2 ♀♀ and 3 unsexed spec., 'Yemen, Soqotra Is. / 24–26/xi.2003 / WADI AYHAFT, 190m / N12°36'38"E53°58'49" / (GPS), David Král lgt. [printed]; followed by: 'YEMEN – SOQOTRA 2003 / Expedition; Jan Farkač, / Petr Kabátek & David Král [printed]' (1 spec. in PVCV; 5 spec. in NMPC); 1 spec., *ibid.* but 'P. Kabátek lgt.' (TLCLM); 1 spec., 'Yemen, Soqotra Is., HOMHIL / protected area, 28.-29.xi.2003 / N 12°34'27" E 54°18'32"E, 364 / m (GPS), leg.P. Kabátek [printed]'; followed by: 'YEMEN – SOQOTRA / 2003 / Expedition; Jan Farkač, / Petr Kabátek & David Král [printed]' (NMPC); 2 spec., 'Yemen, Soqotra Is.; / 5.xii.2003 / BA'A village env. / N 12°32'19" E 54°10'41" / 234 m (GPS); Jan Farkač lgt. [printed]'; followed by: 'YEMEN – SOQOTRA 2003 / Expedition; Jan Farkač, / Petr Kabátek & David Král [printed]' (1 spec. in NMPC; 1 spec. in PVCV); 1 spec., 'Yemen, Soqotra Is., 27.xii.2003 / WADI DENEHGHEN / N 12°36'56" E 54°03'49" / 85 m (GPS), Jan Farkač lgt. [printed]'; followed by: 'YEMEN – SOQOTRA 2003 / Expedition; Jan Farkač, / Petr Kabátek & David Král [printed]' (NMPC); 1 spec., 'YEMEN, SOCOTRA ISLAND / DEIQUB cave 12.vi.2012 / cave & Croton socotranus + / Jatropha unicostata shrubland / 12°23.1'N, 54°00.9'E, 115 m [printed]'; followed by: 'SOCOTRA expedition 2012 / J. Bezděk, J. Hájek, V. Hula / P. Kment, I. Malenovský, / J. Niedobová & L. Purchart leg. [printed]' (PVCV); 1 spec., 'YEMEN, SOCOTRA ISLAND / Aloove area, ALOOVE vill. env. / Jatropha unicostata shrubland / with Boswelia elongata trees / 19.-20.vi.2012 / 12°31.2'N, 54°07.4'E, 221 m [printed]'; followed by: 'SOCOTRA expedition 2012 / J. Bezděk, J. Hájek, V. Hula / P. Kment, I. Malenovský, / J. Niedobová & L. Purchart leg. [printed]' (NMPC); 1 ♀, 'YEMEN, SOCOTRA Island / Aloove area, HASSAN vill. env. / 12°31.2'N, 54°07.4'E, 221 m / P. Hlaváč lgt., 9-10.xi.2010 [printed]' (TLCLM); 1 ♂ and 1 unsexed



Fig. 1. *Pachycraerus socotrensis* sp. nov., habitus in dorsal view.

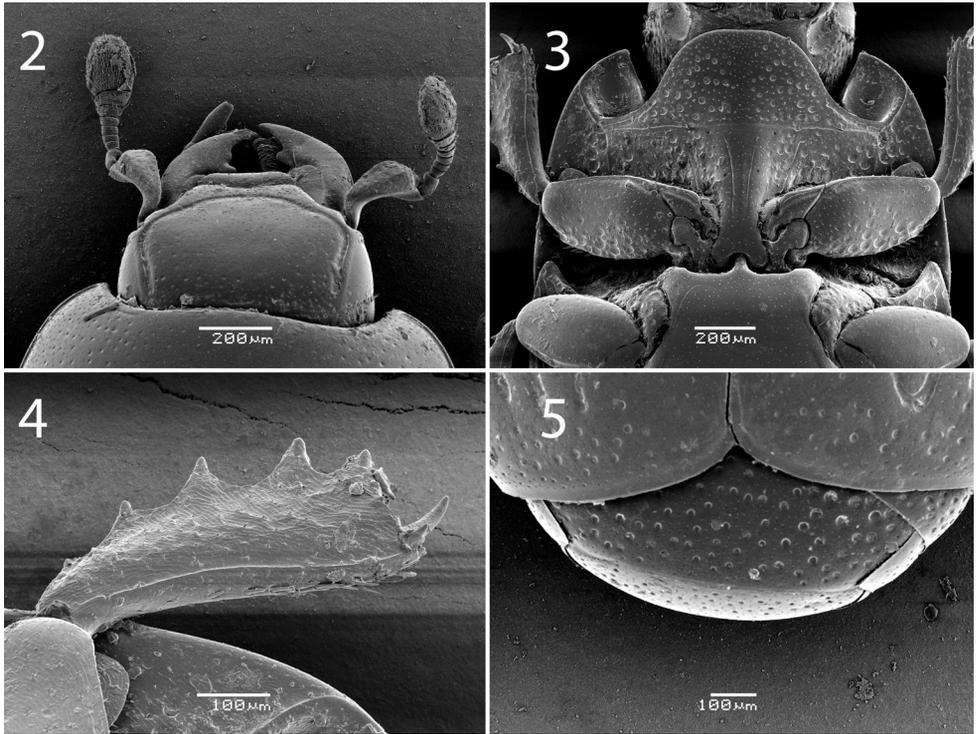
spec., 'YEMEN, SOCOTRA ISLAND / SHEQ vill. env. 8.vi.2012 / *Croton socotranus* + *Jatropha / unicostata* shrubland / 12°39.7'N, 54°03.8'E, 15 m [printed]'; followed by: 'SOCOTRA expedition 2012 / J. Bezděk, J. Hájek, V. Hula / P. Kment, I. Malenovský, / J. Niedobová & L. Purchart leg. [printed]' (NMPC); 1 ♂, 'YEMEN, SOCOTRA Island, / Dixam plateau, / Firmihin (*Dracaena* forest), / 12°28.6'N, 54°01.1'E, 490 m, / L. Purchart leg., 15-16.xi.2010 [printed]' (NMPC); 1 ♂, *ibid*, but 'P. Hlaváč lgt.' (TLCM); 1 spec., 'YEMEN, SOCOTRA Island, Kesa env., 220-300 m / 12°39'37"N, 53°26'42"E / L. Purchart leg., 28.-29.i.2010 [printed]' (NMPC); 1 spec., 'YEMEN, Socotra Isl. / Diksam, 3. 1991 / Wranik lgt.' (TLCM).

Description. Body (Fig. 1). PEL = 2.00–2.50 mm; APW = 0.60–0.90 mm; PPW = 1.10–1.50 mm; EW = 1.30–1.70 mm; EL = 1.40–1.60 mm, elongate, slightly depressed, pronotum dark-brown to black, elytra lighter, castaneous; legs and rest of body appendages reddish-brown.

Head (Fig. 2) broad, finely punctuated, frontoclypeal region slightly depressed; supraorbital stria complete, well-impressed; frontal stria outwardly arcuate, anteriorly nearing epistomal margin. Eyes flattened, but well visible from above; labrum rectangular, approximately three times as broad as long; mandibles stout, pointed apically; each mandible with small subapical tooth; maxillary palpi elongate, terminal palpiger approximately twice as long as penultimate; mentum, submentum as well as maxillary stipites and cardines densely setose. Antennal scape approximately as long as funicle; pedicel thickened, approximately as long as two following antennomeres together; antennal club oval, depressed, intersegmental sutures vague.

Pronotum approximately 1.3 times broader than long across median line, with microscopic punctation, punctures separated by several times their diameter, laterally larger scattered punctures appear intermingled with fine punctation. Lateral pronotal stria well developed laterally, absent behind head; along posterior pronotal margin present irregular row of deep ocellate punctures. Anterior pronotal angles acute; hypomerone asetose.

Elytral epipleural stria thin, complete; marginal elytral stria double; humeral elytral stria very thin, forked apically. Internal subhumeral stria present on apical elytral half, almost attaining elytral apex; elytral striae 1–2 deeply impressed, almost complete, stopping short of elytral apex; stria 1 apically somewhat shorter than stria 2; elytral stria 3 represented on basal third by row of points, apically continues as deeply-impressed stria; dorsal elytral stria 4 present as short elytral fragment. Sutural elytral stria shortened on both basal and apical (approximate) fifths. Elytral disc with scattered microscopic punctation, along elytral apical sixth several scattered larger and deeper punctures appear.



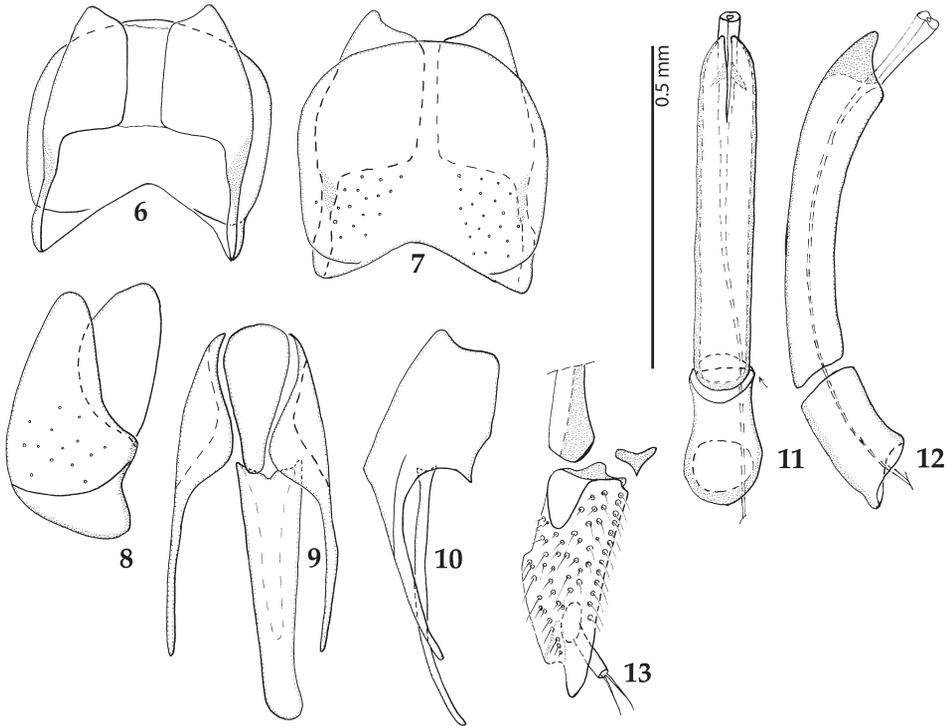
Figs 2–5. Details of *Pachycraerus socotrensis* sp. nov. 2 – head, dorsal view; 3 – mesoventrite and prosternum; 4 – protibia, ventral view; 5 – propygidium and pygidium.

Propygidium (Fig. 5) with microscopic punctation intermingled with deep large punctures separated by twice to several times their diameter; pygidium in basal half with scattered punctures, otherwise almost glabrous.

Prosternum (Fig. 3): prosternal lobe large, outwardly arcuate apically, covered with dense tiny punctation, punctures separated (roughly) by their diameter, intermingled with larger, deeper scattered punctures separated by several times their diameter. Carinal prosternal striae thin, subparallel, slightly divergent anteriorly; lateral prosternal striae costate, divergent anteriorly. Mesoventrite (Fig. 3) glabrous; marginal mesoventral stria well impressed, straight. Meso-metaventral suture vague, meso-metaventral stria absent. Metaventrite even, with scattered microscopic punctation; lateral metaventral stria straight, well impressed, almost reaching metacoxa. Lateral disc of metaventrite with very large and deep punctures separated by less than half their diameter; metanepisternum barely visible, covered with elytral epipleuron.

Abdominal ventrite I even, with scattered microscopic punctation becoming more prominent apically. Lateral stria of abdominal ventrite I slightly costate; laterad to it present another much finer shortened stria parallel to it.

Legs. Protibia (Fig. 4): protibial spur prominent, straight; protarsal groove deep, straight; outer protibial margin with five triangular teeth topped by short denticle, teeth diminishing in



Figs 6–12. *Pachycaerus socotrensis* sp. nov., male genitalia. 6 – sternite and tergite VIII, ventral view; 7 – ditto, dorsal view; 8 – ditto, lateral view; 9 – tergites IX–X, dorsal view, spiculum gastrale (sternite IX), ventral view; 10 – tergites IX–X and spiculum gastrale (sternite IX), lateral view; 11 – aedeagus, dorsal view; 12 – ditto, lateral view; 13 – female genitalia: gonocoxite and median sclerite, dorsal view.

size proximally. Mesotibia likewise with five triangular teeth topped by denticle, teeth growing in size distally. Metatibia slightly longer than mesotibia, with single tiny denticle medially followed by two more slightly larger denticles situated near tarsal insertion.

Male genitalia. Sternite VIII and tergite VIII (Figs 6–8) fused; tergite X (Fig. 9) wedged between divided tergite IX; tergite IX with basal ‘tails’; sternite IX (spiculum gastrale; Fig. 9) anteriorly inwardly arcuate, rounded basally. Parameres of aedeagus (Fig. 11) fused almost along whole length; aedeagus tube-like, median lobe protruding apically (Fig. 12).

Female genitalia (Fig. 13). Median sclerite small, heart-shaped; gonocoxite setose, dentate apically; gonostylus bisetose.

Variability. In some specimens the thin stria next to lateral stria of abdominal ventrite I can be absent, punctures of lateral disc of metaventrite can be sparser, elytral stria 3 can be intermittent and almost complete.

Differential diagnosis. This Socotran species cannot be incorporated into the key of DESBORDES (1922: 384) due to the presence of the following characters: cuticle dark brown to lustrous

pitch-black, elytra with only two complete dorsal striae (although in several specimens dorsal elytral stria 3 is complete, see below); dorsal elytral stria 1 does not reach elytral apex. Based on these particular characters alone, this species occupies an isolated position within the genus *Pachycaerus*. However, several specimens (where dorsal elytral stria 3 is complete) would key out in the aforementioned key near *P. laticeps* Lewis, 1906 described from Tanzania (Kilimanjaro), but do not correspond with it due to smaller body size and more cylindrical body shape. The cylindrical body shape of the Socotran species resembles *P. desidiosus* Marseul, 1854 from tropical Africa and Saudi Arabia, yet there are many differences between these two taxa, apart from different body sizes, dorsal elytral striae (more complete in *P. desidiosus*) and several other characters that separate the two species as well.

Comments. The genus *Pachycaerus* Marseul, 1854, with 63 currently described species, is almost exclusively African in its distribution, with a single undescribed species collected from southern Oman (MAZUR 2011; T. Lackner, unpublished data). Its taxonomy is in flux, and a comprehensive revision of this rather large genus is highly necessary. New genus for the Socotra Archipelago.

Etymology. Patronymic adjective, given after the Socotra archipelago.

Collection circumstances. Found under bark of various trees.

Distribution. Endemic to Socotra Island.

Histerinae: Platsomatini

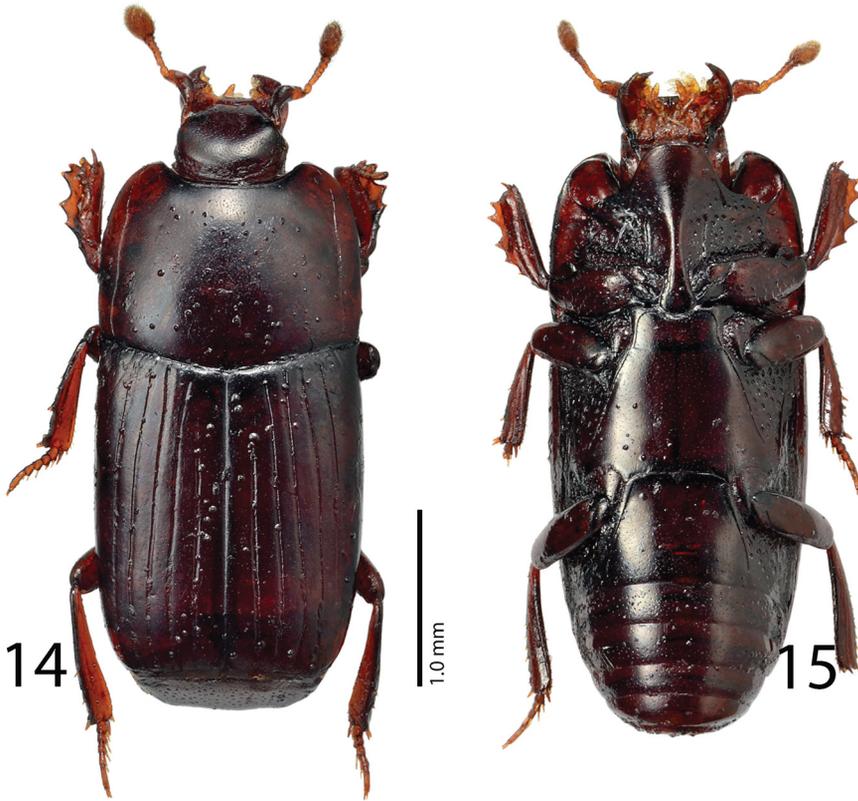
Liopygus occidentalis sp. nov.

(Figs 14–22)

Type material. HOLOTYPE: ♂, side-mounted on a triangular mounting card, genitalia extracted, dismembered and glued to the same mounting card as the specimen, with the following labels: 'YEMEN SOCOTRA Island / Skant area, 1300-1500 m / N 12°34'33", E 54°01'31" / 31.i.-1.ii.2010, L. Purchart lgt.' [printed]; followed by: 'Liopygus occidentalis / sp. nov. HOLOTYPUS / det. T. Lackner & P. Vienna / 2017' [red label, handwritten] (NMPC). ALLOTYPE: ♀, glued on its back on a triangular mounting card, with the following labels: 'YEMEN, Socotra Island / Al Haghier Mts. / Scant Mt. env. / 12°34.6'N, 54°01.5'E, 1450 m / Jiří Hájek leg. 12-13.xi.2010' [printed]; followed by: 'Liopygus occidentalis / sp. nov. ALLOTYPUS / det. T. Lackner & P. Vienna / 2017' (red label, hand-written) (NMPC). PARATYPE: **YEMEN: SOCOTRA:** ♂, side-mounted on a triangular mounting point, genitalia extracted, dismembered and glued to the same mounting card as the specimen, with labels identical to those of the allotype (TLCM).

Description. Body (Figs 14–15). PEL = 2.60–2.80 mm; APW = 0.80–0.90 mm; PPW = 1.30–1.50 mm; EW = 1.40–1.60 mm; EL = 1.60–1.80 mm, flattened, elongate, color light castaneous-brown.

Head. Eyes strongly flattened, not visible from above. Frontoclypeal area finely punctate, slightly depressed, traces of supraorbital striae visible above eye, other striae absent. Labrum flattened, rectangular, each mandible with large triangular subapical tooth. Maxillary palpi very prominent, terminal maxillary palpomere longer than mandible itself, visible from dorsal view. Mentum large, quadrate, labial palpi thick, terminal labial palpomere rather thick, its width approximately half its length. Submentum considerably smaller than mentum, triangular. Antennal scape massive, its length approximately equals to that of antennal funicle. Pedicel thickened, approximately as long as antennomeres III and IV together; club large, oval, setose, intersegmental sutures visible.



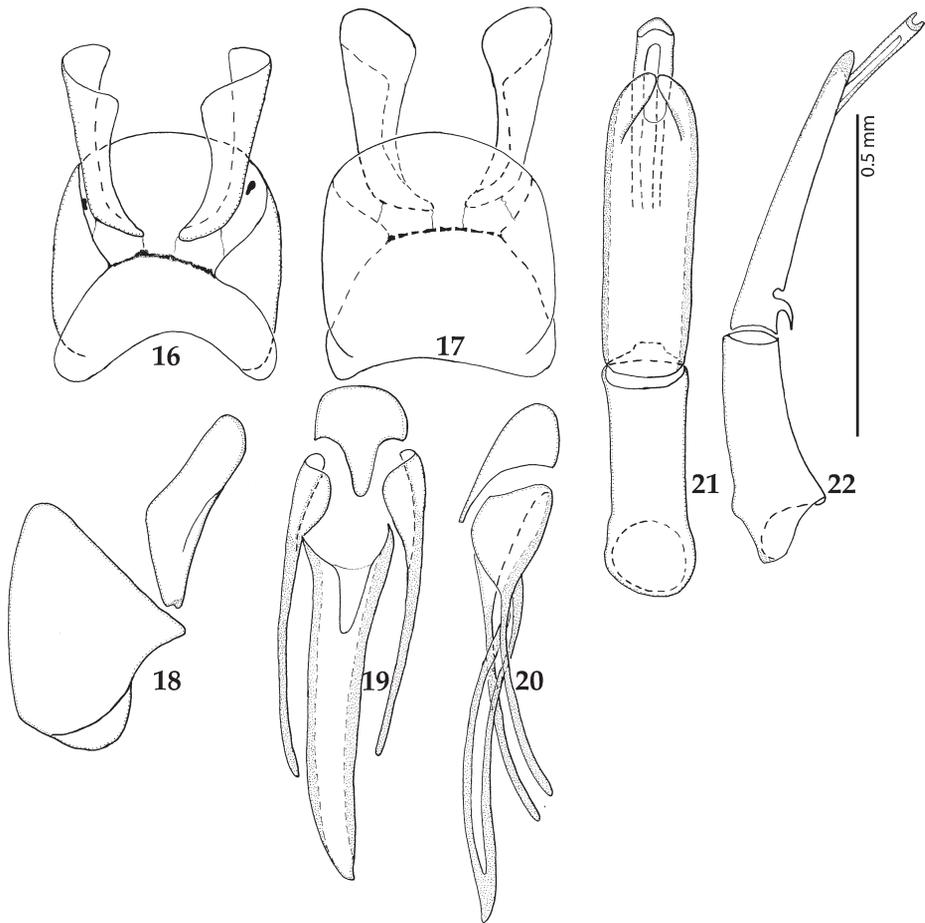
Figs 14–15. *Liopygus occidentalis* sp. nov. 14 – habitus in dorsal view; 15 – habitus in ventral view.

Pronotum almost quadrate, along midline slightly broader than long, anterior angles strongly projected, acute. Marginal pronotal stria very thin, present only on apical angles and behind head; lateral pronotal stria slightly distanced from pronotal margin, parallel to it, terminating anteriorly on anterior pronotal margin. Pronotal disc impunctate; pronotal hypomeron asetose.

Elytra impunctate, approximately twice as long as broad, lateral epipleura bistriate, striae thin, complete; subhumeral elytral striae absent, humeral elytral stria very thin, bifurcate. Elytral disc only with scattered microscopic punctation, dorsal elytral striae 1–4 complete, stria 5 almost complete, shortened basally. Sutural elytral stria absent.

Propygidium broad, approximately 2.5 times as broad as long, with scattered deep ocellate punctures, separated by approximately 1.5–2.0 times their diameter. Pygidium in basolateral angles with two shallow depressions, each with deep fossa; pygidial surface basally with several vague shallow punctures, otherwise impunctate.

Prosternal lobe (Fig. 15) large, rounded, with scattered microscopic punctation; marginal prosternal stria present, weakened to absent on apex. Carinal prosternal striae present as



Figs 16–22. *Liopygus occidentalis* sp. nov., male genitalia. 16 – sternite and tergite VIII, ventral view; 17 – ditto, dorsal view; 18 – ditto, lateral view; 19 – tergites IX–X, dorsal view, spiculum gastrale (sternite IX), ventral view; 20 – tergites IX–X and spiculum gastrale (sternite IX), lateral view; 21 – aedeagus, dorsal view; 22 – ditto, lateral view.

very vague rudiments on prosternal apophysis; lateral prosternal striae double, deeply impressed, subparallel and bisinuate; surface of composite ventral plate laterad to it with large deep ocellate punctures. Mesoventrite (Fig. 15) anteromedially deeply inwardly arcuate, marginal mesoventral stria present, thin, disc glabrous. Metaventrite (Fig. 15) flattened, with scattered microscopic punctation, lateral metaventral stria long, almost straight, nearly reaching metacoxa. Lateral disc of metaventrite with several large deep ocellate punctures; metanepisternum covered by elytral epileuron, not visible.

Abdominal ventrite I (Fig. 15) with scattered microscopic punctation, striate laterally.

Legs. Protibial spur prominent; protarsal groove deep; outer protibial margin with 5 rather prominent teeth topped by tiny denticle; teeth 2–3 widely separated; mesotibia on outer margin with two widely spaced short denticles, two additional longer denticles situated near tarsal insertion; outer margin ventrally with sparse row of tiny widely spaced denticles. Metatibia slightly longer than mesotibia, otherwise similar to it, except for there is only a single denticle on outer margin medially instead of two.

Male genitalia. Sternite VIII (Figs 16–17) divided into two parts; tergite VIII and sternite VIII not fused (Fig. 18). Tergite IX (Fig. 19) divided into two parts; tergite X (Figs 19–20) small, its basal part wedged between the divided parts of tergite IX; sternite IX (Figs 19–20) or spiculum gastrale apically divided into two ‘tails’, pointed basally. Aedeagus (Fig. 21) tube-like, median lobe protruding from tegmen; phallobase (Fig. 22) approximately 1.5 times shorter than fused parameres.

Differential diagnosis. The Socotran species strongly resembles the species *Liopygus decemstriatus* (Motschulsky, 1863) from Sri Lanka. It can, however, be readily distinguished from it based on the following characters: both dorsal elytral striae 2 and 4 are complete in the Socotran species (incomplete in *L. decemstriatus*); dorsal elytral stria 5 reaches even further basally in the Socotran species; propygidium of the Socotran species is entirely punctate (only partly punctate in *L. decemstriatus*); pygidium of the Socotran species is punctate only in its proximal part between the two fossa (pygidium of *L. decemstriatus* is punctate entirely).

Comments. The genus *Liopygus* Lewis, 1891 contains 16 described species distributed exclusively in southeast Asia (MAZUR 2011). All *Liopygus* species, as far as known, live under bark, preying on small arthropods (DESBORDES 1919). Although DESBORDES (1919) published a key to the species of the genus, difficulties using it for species determination were voiced by GOMY (2006), who described the only species of *Liopygus* after the World War II. The discovery of a member of *Liopygus* in Socotra Archipelago, considerably far from the distribution area of the genus is highly interesting, and we advocate a revision of the genus.

Etymology. Specific epithet, the Latin adjective ‘*occidentalis*’ (= western), refers to the disjunct geographical location of the new species.

Distribution. Endemic to Socotra Island, so far known only from the highest part of Hagher mountains.

Histerinae: Histerini

Atholus bimaculatus (Linnaeus, 1758)

Material examined. YEMEN: SOCOTRA: 1 spec., wadi Ayhaft, 12°36'38"N, 53°48'49"E, 190 m, 24.–26.xi.2003, D. Král lgt.; 1 spec., Homhil protected area, 12°34'27"N, 54°18'32"E, 364 m, 28.–29.xi.2003, D. Král lgt.; 5 spec., Al Hagher Mts., wadi Madar, 12°33.2'N, 54°00.4'E, 1180–1230 m, 12.–14.xi.2010, J. Bezděk, J. Hájek & L. Purchart lgt.; 2 spec., Hagher Mts., Scand Mt. env., montane evergreen woodland, 12°34.6'N, 54°01.5'E, 1450 m, 16.–18.vi.2012, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (all NMPC).

Comments. This species, described from ‘Europe’ is nearly cosmopolitan (MAZUR 2011). It occurs both on mammal faeces and carcasses. Reported from Socotra already by WRANIK (2003).

Dendrophilinae: Paromalini***Eutriptus jirinae* Lackner & Kapler, 2007**

Material examined. YEMEN: SOCOTRA: 14 spec., Dixam Plateau, Firmihin, 400–500 m, 12°28'27"N, 54°00'64"E, 22.–25.vi.2009, L. Purchart & J. Vybíral lgt. (1 ex. in TLCM; 13 exs. in NMPC); 9 spec., Dixam Plateau, Firmihin (Dracaena forest), 12°28.6'N, 54°01.1'E, 490 m, 15.–16.xi.2010, J. Hájek lgt. (6 spec. in PVCV; 3 spec. in NMPC); 2 spec., Wadi Zirik, 650–670 m, 12°29'35"N, 53°59'28"E, 16.vi.2009, L. Purchart lgt. (1 spec. in TLCM; 1 spec. in NMPC); 1 spec., Wadi Ayhaft, 24.–26.xi.2003, 12°36'38"N, 53°58'49"E, 190 m, P. Kabátek lgt. (TLCM); 2 spec., Dixam Plateau, 14.–15.vi.2012, Firmihin, Dracaena woodland, 12°28.6'N, 54°01.1'E, 490 m, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (TLCM).

Comments. Its occurrence on the island is mainly on Dixam Plateau, in Wadi Zirik and Wadi Ayhaft (LACKNER & KAPLER 2007, present paper). Endemic to Socotra.

***Platylomalus digitatus* (Wollaston, 1867)**

Material examined. YEMEN: SOCOTRA: 1 spec., Dixam Plateau, Firmihin (Dracaena forest), 12°28.6'N, 54°01.1'E, 490 m, 15.–16.xi.2010, Jan Batelka lgt. (NMPC); 1 spec., Socotra W, 12°39'37"N, 53°26'42"E, 240–300 m, 15.vi.2009, L. Purchart lgt. (NMPC); 1 spec., Wadi Ayhaft, 190 m, 12°36.5'N, 53°58.9'E, 200 m, 7.–8.xi.2010, P. Hlaváč lgt. (TLCM).

Comments. This species was described from the Cape Verde Archipelago, but it occurs in the entire region of tropical Africa (MAZUR 2011). Recently KANAAR (2008) reported it also from the United Arab Emirates. In the light of its UAE discovery, its occurrence in Socotra, an island between the continent of Africa and the Arabian Peninsula, is not surprising.

Abraeinae: Plegaderini***Plegaderus (Plegaderus) sp.***

(Fig. 23)

Material examined. YEMEN: SOCOTRA: 1 ♀, Al Haghier Mts., Wadi Madar, 12°33.2'N, 54°00.4'E, 1180–1230 m, 12.–14.xi.2010, P. Hlaváč lgt. (TLCM).

Comments. Genus *Plegaderus* Erichson, 1834 contains two subgenera: monotypic *Hemirichoderus* Reichardt, 1941 with a single species *P. (H.) adonis* Marseul, 1876 described from Cyprus and also occurring in Turkey, and the nominotypical subgenus, which contains 27 species spread mostly in the Holarctic Region (MAZUR 2011). The species from Socotra belongs to the group of species with deeply impressed median stria on pronotum, dividing it into two convex parts (Fig. 8). Other species of this group are: *P. (P.) caesus* (Herbst, 1791), spread across Europe, Turkey, Azerbaijan and north Iran; *P. (P.) dissectus* Erichson, 1839 spread across southern England, central and south Europe, Turkey and north Iran; and the extremely rare *P. (P.) fortesculptus* Reitter, 1897 described from Azerbaijan and occurring also in Iran (MAZUR 2011). In fact, the type specimen of *P. (P.) fortesculptus* was discovered only recently (LACKNER, unpublished). SECQ & SECQ (1991) beautifully depicted the two former species in their key to French Plegaderini. Of the three, the species from Socotra most resembles *Plegaderus (P.) caesus*, which likewise possesses a string of tiny, equally distanced granules along lateral pronotal margins. The Socotran species differs, however, from *P. (P.) caesus*, in

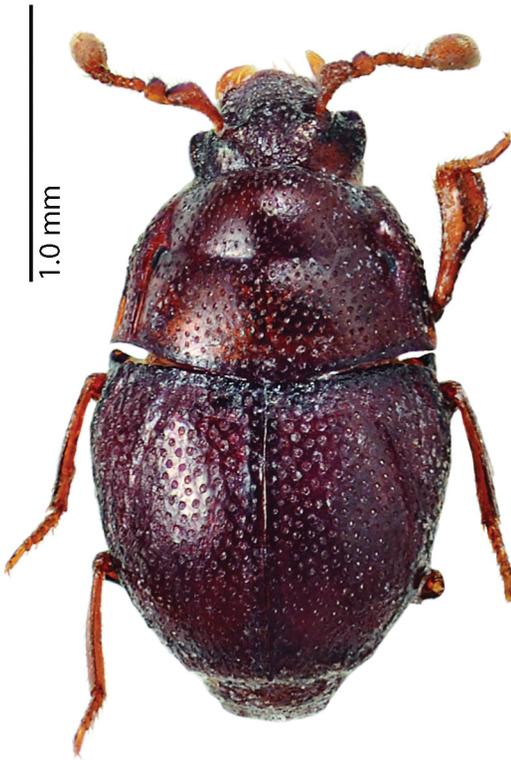


Fig. 23. *Plegaderus* sp., habitus, dorsal view.

its smaller size, anteriorly narrowed pronotum; less impressed punctation of the elytra, in more dilated apices of protibia, body shape more rounded; the shape of prosternum, as well as in other characters. The herein depicted specimen from Socotra (Fig. 8) most likely belongs to a new species, we are, however, reluctant to describe it based on a single female. This is the first record of the genus *Plegaderus* from the Afrotropical Region, to which the Socotran Archipelago biogeographically belongs.

Abraecinae: Acritini

Acritus (*Acritus*) sp.

Material examined. YEMEN: SOCOTRA: 1 spec., Dixam Plateau, Firmihin (Dracaena forest), 15.–16.x.2010, 12°28.6'N, 54°01.1'E, 490 m, J. Hájek lgt. (NMPC).

Comments. The genus *Acritus* LeConte, 1853 contains two subgenera: *Pycnacritus* Casey, 1916 with 9 described species found across the globe, and the nominotypical subgenus containing 118 currently recognized species with vast circumglobal

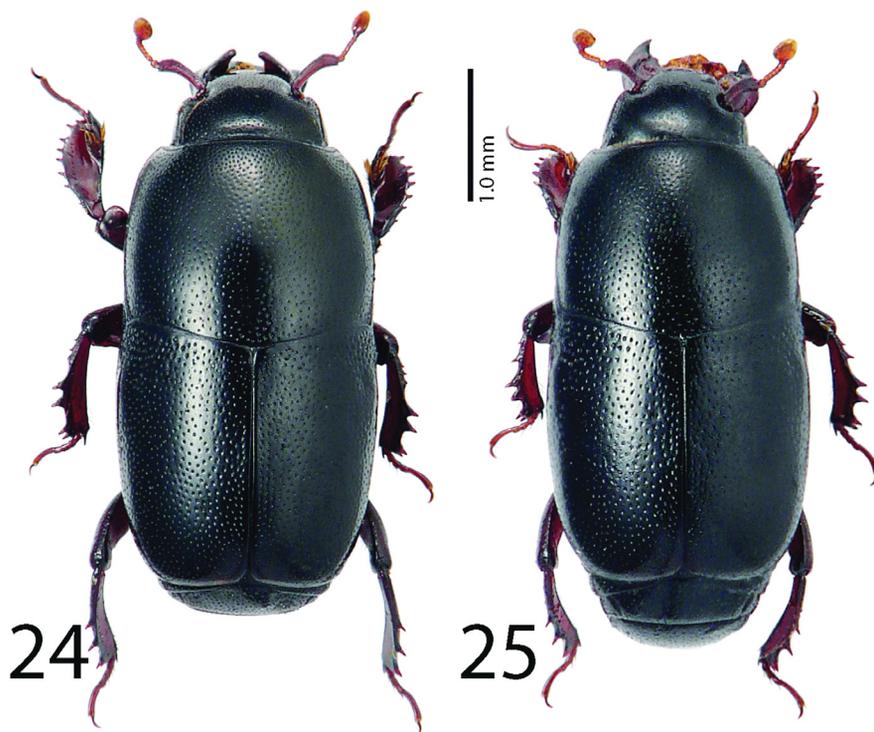
distribution (MAZUR 2011). *Acritus* belongs to the so-called ‘micro-histeridae’ – a group of poorly studied and species-rich taxa that most likely feed on acarids. We were unable to identify the sole specimen from Socotra even after having consulted the matter with Y. Gomy (Nevers, France), who is a specialist on the ‘micro-histerids’.

Abraecinae: Teretriini

Teretrius (*Neoteretrius*) *dispar* sp. nov.

(Figs 24–39)

Type material. HOLOTYPE: ♂, side-mounted on a triangular mounting card, genitalia extracted, dismembered and glued to the same mounting card as the specimen, with the following printed labels: ‘YEMEN, SOCOTRA ISLAND / Aloove area, ALOOVE vill.env. / Jatropha unicostata shrubland / with Boswellia elongata trees / 19.-20.vi.2012 / 12°31.2'N, 54°07.4'E, 221 m’; followed by: ‘SOCOTRA expedition 2012 / J. Bezděk, J. Hájek, V. Hula / P. Kment, I. Malenovský, / J. Niedobová & L. Purchart leg.’; followed by: ‘Teretrius (*Neoteretrius*) / *dispar* sp.nov. / HOLOTYPE / Det. T. Lackner & P. / Vienna 2017’ (red label) (NMPC). PARATYPES: YEMEN: SOCOTRA: 19 ♂♂ 16 ♀♀ and 8 unsexed spec., with the identical labels as those of holotype (5♂♂ 5♀♀ in TLCM, 14 ♂♂ 11 ♀♀ in NMPC; 8 spec. in PVCV); 1 ♂, ‘YEMEN, SOCOTRA Island / Aloove area, HASSAN vill. env. / 12°31.2'N, 54°07.4'E, 221 m /

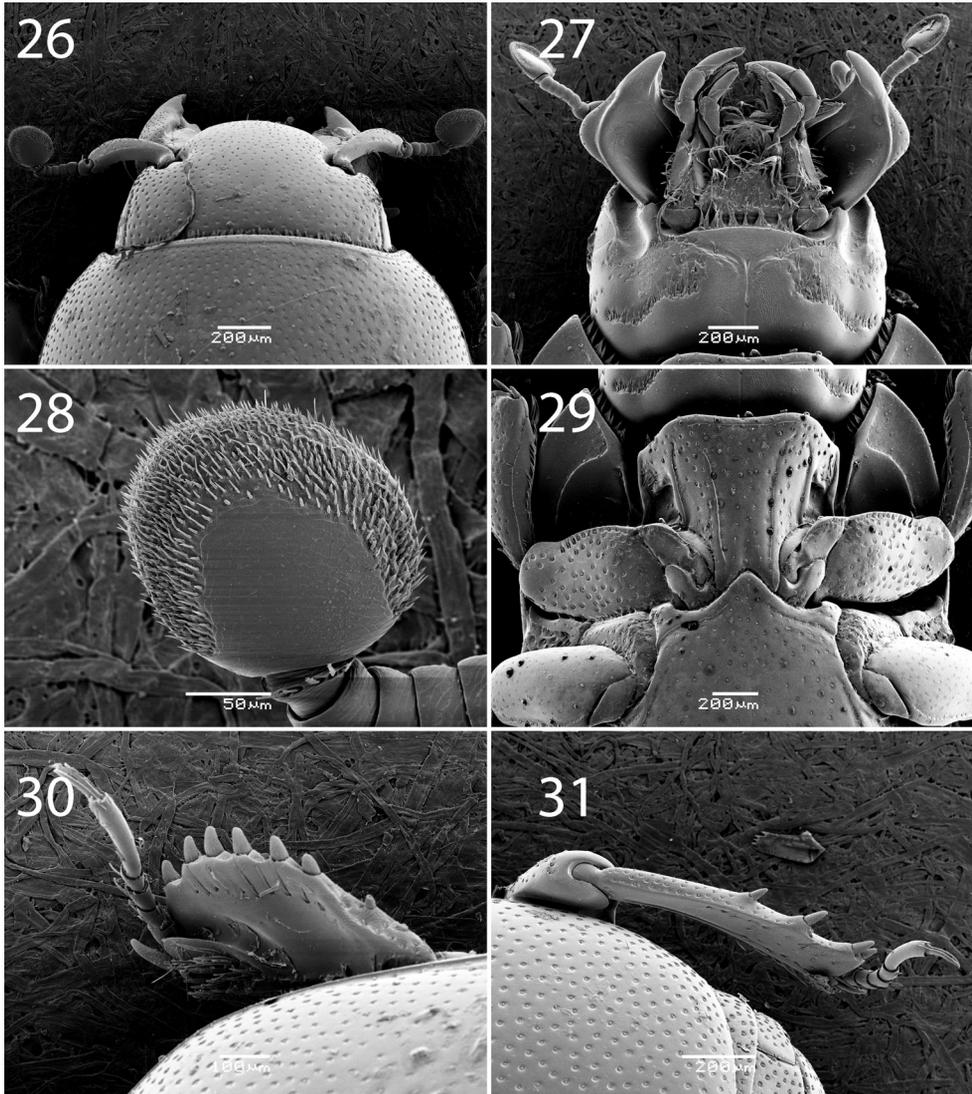


Figs 24–25. Habitus of *Teretrius* (*Neoteretrius*) *dispar* sp. nov. 9 – male, dorsal view; 10 – female, dorsal view.

Jiří Hájek leg. 9.-10.xi.2010' [printed] (NMPC); 3 ♂♂ 1 ♀, 'YEMEN, SOCOTRA Island, / wadi Ayhaft, / 12°36.5'N, 53°58.9'E, 200 m, / L. Purchart leg., 7.-8.xi.2010' [printed] (NMPC); 1 ♂, 'Yemen, Soqotra Is. / 24–26/xi.2003 / WADI AYHAFT, 190m / N12°36'38"E53°58'49" / (GPS), David Král lgt.' [printed]; followed by: 'YEMEN – SOQOTRA 2003 / Expedition; Jan Farkač, Petr Kabátek & David Král' [printed] (NMPC); 1 ♂ 3 ♀♀, 'YEMEN, SOCOTRA / Aloove area, HASSAN vill. / env. 221 m / 12°31.2'N, 54°07.4'E 9- / 10.xi. 2010 P. Hlaváč' [printed] (TLCM).

Description. Body (Figs 24–25). length PEL = 2.9–3.2 mm; APW: 0.8–1.0 mm; PPW = 1.5–1.7 mm; EW = 1.6–1.8 mm; EL = 1.5–1.8 mm. Body short and stout, cylindrical, strongly convex. Cuticle black, shining, pronotum and elytra entirely punctate, punctures separated by 1–3 times their diameter. Body appendages light to chestnut brown.

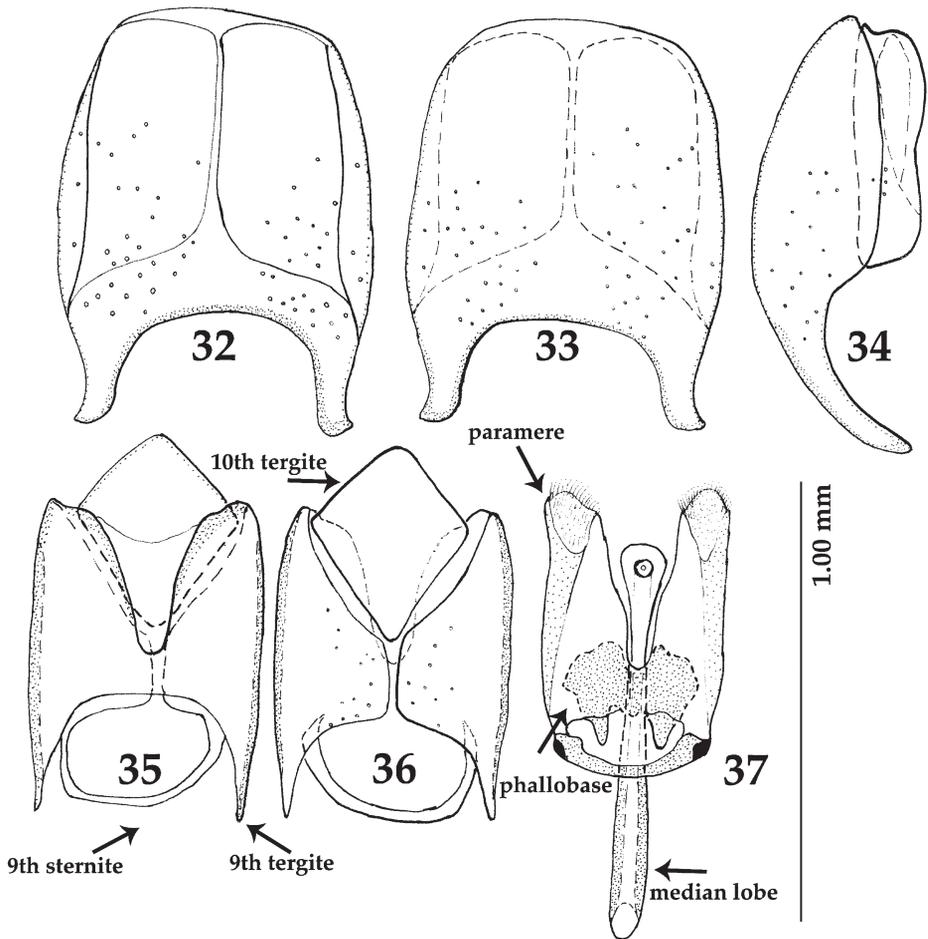
Head. Frons (Fig. 26) flattened to slightly convex, punctate, punctures separated by 2–3 times their diameter; frontal and supraorbital striae absent. Clypeus flattened, broad, its punctation similar to that of frons. Labrum inwardly arcuate, with dense tuft of long amber setae; mandibles laterally expanded (Fig. 27), their dorsal surface with prominent stout projection ('horn'), punctate. Antennal club (Fig. 28) circular, flattened, its circumference with several rows of tiny setae; rest of club asetose.



Figs 26–31. Details of male of *Teretrius* (*Neoteretrius*) *dispar* sp. nov. 26 – head, dorsal view; 27 – head, ventral view; 28 – antenna club, ventral view; 29 – mesoventrite and prosternum; 30 – protibia, dorsal view; 31 – metatibia, dorsal view.

Pronotal sides parallel on their basal 5/6, thence convergent anteriorly, apical angles obtuse. Marginal pronotal stria complete, weakened behind head, laterally carinate.

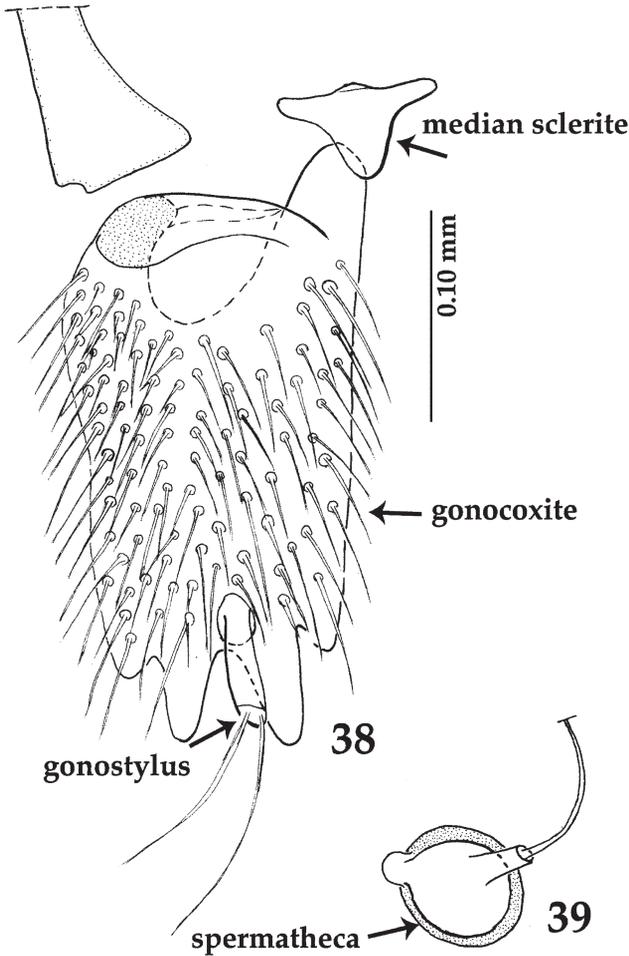
Elytral epipleuron laterally with impunctate band; marginal epipleural and marginal elytral striae either absent or indiscernible. Dorsal elytral striae completely absent; elytral humeri with glabrous oval ‘mirror’; rest of elytra densely punctate.



Figs 32–37. Male genitalia of *Teretrius* (*Neoteretrius*) *dispar* sp. nov. 32 – sternite and tergite VIII, ventral view; 33 – same, dorsal view; 34 – same, lateral view; 35 – spiculum gastrale (sternite IX), dorsal view, tergites IX–X, ventral view; 36 – spiculum gastrale (sternite IX), ventral view, tergites IX–X, dorsal view; 37 – aedeagus, ventral view.

Propygidium pentagonal, punctate; pygidium slightly convex, evenly punctate, punctures of both propygidium and pygidium similar to those of elytra, but somewhat finer.

Anterior margin of prosternum (Fig. 29) slightly inwardly arcuate; marginal prosternal stria present anteriorly, complete; lateral prosternal striae strongly carinate, apically almost reaching marginal prosternal stria. Carinal prosternal striae subparallel to slightly divergent apically, not reaching anterior margin of prosternum (stopping just short of it). Entire disc of prosternum with scattered deep punctures separated by several times their diameter.



Figs 38–39. Female genitalia of *Teretrius (Neoteretrius) dispar* sp. nov. 23 – gonocoxite and gonostylus, dorsal view; 24 – spermatheca.

Anterior margin of mesoventrite (Fig. 29) strongly projected; marginal mesoventral stria almost complete, not reaching mesoventral base laterally; disc of mesoventrite with sparse punctures; meso-metaventral stria absent. Metaventricle sparsely punctate, punctures most prominent along basal margin; lateral metaventral stria well developed, slightly carinate, curved outwardly and reaching mesepimeron. Metanepisternum narrow, with scattered punctures. Abdominal ventrite I without lateral striae; disc with denser and more prominent punctation than that of metaventricle.

Protibia (Fig. 30) on outer margin with approximately ten densely set denticles; denticle 2 and 3 separated by a 'gap'; protibial spur long and thick; protibial groove deep; terminal protarsomere approximately as long as protarsomeres I–IV together. Mesotibia on outer margin with six denticles, denticles 3–6 situated atop triangular 'teeth'; metatibia (Fig. 31) longer

and more slender than mesotibia, outer margin adorned with three shorter, widely spaced denticles; both terminal tarsomeres approximately as long as the preceding four together.

Male genitalia. Sternite VIII (Figs 32–34) separated into two halves medially, without setae apically; tergite VIII apically outwardly arcuate, with scattered pores. Sternite IX (spiculum gastrale) in form of irregularly shaped circle (Fig. 35), tergite IX (Figs 35–36) ventrally deeply emarginate medially, dorsally separated into two halves medially; tergite X (Figs 35–36) triangular. Phallobase (Fig. 37) butterfly-shaped, situated beneath basally fused parameres; parameres (Fig. 37) separated in their apical two-thirds, their apices adorned with microscopic setae; median lobe (Fig. 37) spoon-like, long and narrow.

Variability. Elytra in several specimens dark brown.

Female. Similar to male in habitus; mandibles simple, stout. Genitalia: disc of gonocoxite (Fig. 38) densely setose; apex quadrilobed; gonostylus short, narrow, bearing two long setae apically. Median sclerite (Fig. 38) triangular, resembling bull's skull; spermatheca (Fig. 39) globular.

Differential diagnosis. This new species is rather large for the subgenus *Neoteretrius* and can be characterised by the following: mesoventrite without meso-metaventral stria, anterior margin of prosternum almost straight, weakly inwardly arcuate; carinal prosternal striae subparallel to weakly divergent anteriorly, outer margin of protibia with approximately 10 denticles. *Teretrius dispar* sp. nov. can be placed in the key of BICKHARDT (1921) (the only existing key to identify the members of *Teretrius* Erichson, 1834, which according to KANAAR (2008) requires revision) before species *T. (N.) antelatus* Lewis, 1914 from the Democratic Republic of Congo and Nigeria. Although we are not familiar with this species, it appears to differ from the newly described *T. (N.) dispar* in the dorsal punctation, smaller body size, the structure of the prosternal striae, as well as in other, minor characters. However, the most distinctive character of the newly described species is found on the mandibles, which are unusually large, strongly bent, wide at base and in ♂♂ furnished with a well developed, inwardly turned acute horn. A sexually dimorphic species, the ♀♀ are devoid of such a horn.

Etymology. The specific epithet of the new species is Latin adjective meaning 'different'. We chose this name to point out the sexual dimorphism between the two sexes, where the male is adorned with mandibular 'horns' whereas the female is without them.

Collection circumstances. The specimens of the type series were mostly collected under bark of dead *Boswellia elongata* Balf. f. trees (J. Hájek, pers. comm.), see also KNÍŽEK (2012a,b).

Distribution. Endemic to Socotra Island.

Teretrius (Teretrius) sp. 1

Material examined. YEMEN: SOCOTRA: 46 spec., Wadi Ayhaft, 200 m, 7.–8.xi.2010, 12°36.5'N, 53°58.9'E, L. Purchart lgt. (7 spec. in PVCV, 7 spec. in TLCD, 32 spec. in NMPC); 13 spec., Aloove area, Aloove vill. env., Jatropha uncostata shrubland, with *Boswellia elongata* trees, 19.–20.vi.2012, 221 m, 12°31.2'N, 54°07.4'E, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (NMPC); 7 spec., Aloove area, Hassan vill. env., 9.–10.xi.2010, 221 m, 12°31.2'N, 54°07.4'E, J. Hájek lgt. (NMPC); 1 spec., Wadi Zirik, 650–670 m, 30.vi.2010, 12°29'35"N, 53°59'28"E, L. Purchart lgt. (NMPC).

Comments. The nominotypical subgenus *Teretrius* is a taxonomically complicated unit currently containing 76 described species spread across the entire world, with the bulk of species

known from tropical Africa (MAZUR 2011). Its members live subcortically on various kinds of deciduous trees (mainly acacias in tropical Africa), hunting the larvae of coleopteran (sub) families Bostrichidae and Curculionidae: Scolytinae. Several species of *Teretrius* have been even used in the pest control (see e.g. HOLST & MEIKLE 2003). Identification of the species of both subgenera *Neoteretrius* and *Teretrius* s. str. is complicated by the fact that the taxa are generally uniform in outlook, their descriptions are often very concise and lack depiction of the diagnostic characters. In fact, the male genitalia of members of both subgenera were first correctly illustrated by ÔHARA (2008). The presence of misidentified or doubtfully identified specimens in the collections that could be used as the reference specimens creates further confusion in the determination (KANAAR 2008). Given the above facts, we refrain from describing new taxa and record the above and the following species under a number pending an urgently needed revision of this genus.

Teretrius (Teretrius) sp. 2

Material examined. YEMEN: SOCOTRA: 1 spec., Dixam plateau, Firmihin (Dracaena forest), 12°28.6'N, 54°01.1'E, 490 m, 15.–16.xi.2010, J. Bezděk lgt. (NMPC); 1 spec., Aloove area, Aloove vill. env., Jatropha uncostata shrubland with Boswellia elongata trees, 12°31.2'N, 54°07.4'E, 221 m, 19.–20.vi.2012, 221 m, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (NMPC); 1 spec., Dixam Plateau, Wadi Esgego, 300 m, 2.–3.xii.2003, 12°28'09"N, 54°00'36"E, D. Král lgt. (NMPC); 6 spec., 10 km W of Hadiboh, 23.xi., 11.xii.2003, 10–70 m, P. Kabátek lgt., ex larvae (2 spec. in PVCV, 2 spec. in TLCD, 2 spec. in NMPC).

Teretrius (Teretrius) sp. 3

Material examined. YEMEN: SOCOTRA: 1 spec., Wadi Ayhaft, 12°36.5'N, 53°58.9'E, 200 m, 7.–8.2010, L. Purchart lgt. (NMPC).

Teretrius (Teretrius) sp. 4

Material examined. YEMEN: SOCOTRA: 1 spec., Firmihin Plateau, 400–500 m, 12°28'46"N, 54°00'89"E, 18.–19.vi.2010, V. Hula & J. Niedobová lgt. (NMPC).

Saprininae

Saprinus (Saprinus) bicolor (Olivier, 1789)

Material examined. YEMEN: SOCOTRA: 1 spec., Halla area, Arher, freshwater spring in sand dune, 9.–10. + 15.vi.2012, 12°33.0'N, 54°27.6'E, 5 m, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (NMPC); 2 spec., Dixam plateau, wadi Zerriq, 12°31'08"N, 53°59'09"E, 750 m, 3.xii.2003, D. Král leg., P. Vienna det. 2004 (NMPC).

Comment. *Saprinus (S.) bicolor* is an attractive large species, mostly found on carrion, with distribution across tropical Africa and the Arabian Peninsula, with records also from the British Overseas Territory of Saint Helena (MAZUR 2011). Its occurrence in Socotra is in line with its general distribution. First record from Socotra.

Saprinus (Saprinus) caerulescens caerulescens (Hoffmann, 1803)

Material examined. YEMEN: SOCOTRA: 28 spec., Dixam plateau, wadi Zerriq [Zerig], 12°31'08"N, 53°59'09"E, 750 m, 3.xii.2003, D. Král lgt. (NMPC).

Comment. *Saprinus (S.) caerulescens caerulescens* is a large, free-living volant predator, found mostly on larger carrion where it preys on larvae of smaller arthropods, especially cyclorrhaphan flies (T. Lackner, pers. observ.). According to MAZUR (2011), it is distributed in southern Europe, Mediterranean subregion, the Azores and Cape Verde Archipelago, and Middle Asia. It has been introduced into Peru. From Socotra already reported by WRANIK (2003).

Saprinus (Saprinus) chalcites (Illiger, 1807)

Material examined. YEMEN: SOCOTRA: 1 spec., Momi-Homhil, 14.vi.2009, V. Hula lgt.; 1 spec., Noked plain, Abataro, border of sand dunes and shrubland, 12.–13.vi.2012, 12°22.1'N, 54°03.4'E, 20 m, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt.; 1 spec., Homhil area, 400–510 m, 12°34'25"N, 54°18'53"E, 9.–10.ii.2010, L. Purchart & J. Vybíral, lgt.; 1 spec., Socotra, wadi Hoq, 12°41'32"N, 54°01'35"E, 54 m, 22.xi.2003, P. Kabátek lgt.; 2 spec., Socotra, Noked plain, sand dunes, 12°21'09"N, 54°01'47"E, 11 m, 5.–6.xii.2003, D. Král lgt. (all NMPC).

Comment. The distribution of *Saprinus (S.) chalcites* covers a vast territory and is comparable with the following species. It is found in the entire Mediterranean subregion, Africa, in the Arabian Peninsula and in Middle Asia, India, Burma and it has also been introduced into Australia (MAZUR 2011). It is another typical saprobiont found on carrion and mammal excrements. First record from Socotra.

Saprinus (Saprinus) flavipennis Péringuey, 1885

Material examined. None.

Comments. This species is widespread in Africa with records from southern Yemen (PENATI & VIENNA 2006). Reported from Socotra already by WRANIK (2003) under the name *S. (S.) cruciatus flavipennis*.

Saprinus (Saprinus) splendens (Paykull, 1811)

Material examined. YEMEN: SOCOTRA: 2 spec., wadi Ayhaft, 12°36'38"N, 53°58'49"E, 190 m, 24.–26.xi.2003, D. Král lgt.; 1 spec., Noked plain, sand dunes, 12°21'09"N, 54°01'47"E, 11 m, 5.–6.xii.2003, D. Král lgt.; 8 spec., Shibhon, wadi Zirik [Zerig], 16.vi.2009, V. Hula & L. Purchart lgt.; 26 specs., Homhil area, 400–510m, 12°34'25"N, 54°18'53"E, 9.–10.ii.2010, L. Purchart & J. Vybíral lgt.; 7 spec., Zemhon area, 12°20'58"N, 54°06'39"E, 16.–17.vi.2010, V. Hula lgt.; 1 spec., Hoq cave env., 12°35'10"N, 54°21'31"E, 215 m, 1.vi.2012, V. Hula & J. Niedobová lgt. (all NMPC).

Comment. *Saprinus (S.) splendens* is a common, widely distributed species, occurring on carrion in the entire region of tropical and subtropical Africa, the Arabian Peninsula, in the entire Oriental Realm, including Japan in the east, and it is likewise widely spread in Australia (MAZUR 2011). From Socotra already reported by TASCHENBERG (1883), GAHAN (1903) and THÉRY et al. (2009).

Hypocaccus (Hypocaccus) virescens Thérond, 1963

Material examined. YEMEN: SOCOTRA: 3 spec., Noked plain, Abataro, border of sand dunes and shrubland, 12.–13.vi.2012, 12°22.1'N, 54°03.4'E, 20 m, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart, lgt. (2 spec. in NMPC, 1 spec. in TLCM); 1 ♀, Noked Plain (sand dunes), Sharet Halma vill. env., 12°22.9'N, 54°03.4'E, 20 m, 10.–11.xi.2010, J. Bezděk lgt. (NMPC); 1 ♂, ditto, but L. Purchart lgt. (TLCM);

1 ♂, Hallah Arhar (spring), 12°33.0'N, 54°27.6'E, 15 m, 10.–11.xi.2010, J. Bezděk lgt. (NMPC); 1 ♂, Wadi Ayhaft, 12°36.5'N, 53°58.9'E, 200 m, 7.–8.xi.2010, J. Hájek lgt. (NMPC).

Comments. LACKNER (2013) examined the type series of the sand-dwelling *H. virescens*, and commented on the dubious subgeneric placement of this species, placed since its description in the subgenus *Baeckmanniolus* Reichardt, 1926. Members of *Baeckmanniolus* are (sensu BOUSQUET & LAPLANTE 2006) defined by the completely glabrous pronotum and possession of three rows of denticles on outer metatibial margin. In several Socotran specimens, the pronotal punctation is limited to 'a small cluster of scattered and fine punctures near anterior angles' as observed by LACKNER (2013) among the members of the type series. Other examined specimens from Socotra, however, have the pronotal punctation more prominent, covering lateral pronotal sides, anterior angles as well as postocular area of pronotum. Based on the punctate pronotum, as well as presence of only two rows of denticles on outer metatibial margin, the species *Hypocaccus virescens* is removed from the subgenus *Baeckmanniolus* and placed into the nominotypical subgenus.

Originally described from Somalia, reported also from Bahrain (MAZUR 2011). First record from Socotra.

Hypocacculus (Colpellus) praecox (Erichson, 1834)

Material examined. YEMEN: SOCOTRA: 1 spec., Wadi Hoq, 22.xi.2003, 12°41'32"N, 54°01'35"E, 54 m, P. Kabátek lgt. (NMPC); 1 spec., Socotra, Noged plain, Wadi Irech, 12°23'11"N, 53°59'47"E, 95 m, 6.–7.xii.2003, D. Král lgt. (NMPC).

Comments. This species is widespread in the entire Mediterranean Subregion, with records from the Canary and Cape Verde Islands, furthermore it occurs in the region of Sahel, Ethiopia, the Arabian Peninsula and Afghanistan (MAZUR 2011). It belongs to the group of typical free-living volat saprobionts and is most commonly found on carrion or on mammal excrements. First record from Socotra.

Neopachylopus secqi Kanaar, 1998

Material examined. YEMEN: SOCOTRA: 1 spec., Socotra, Gubbah vill. env., 12°36'35"N, 53°46'56"E, 7 m, 23.xi.2003, D. Král lgt. (NMPC).

Comments. This species is known from Djibouti and north Yemen (MAZUR 2011). It occurs on the seashores, chiefly under wrack or decomposing fish. First record from Socotra.

Discussion

Based on our study, the histerid fauna of Socotra Island contains 20 species, a considerable number of which (seven species, i.e. more than a third) could not, due to the poor knowledge of their taxonomy, be identified to species and are only given generic, or subgeneric rank. Based on their biology, the identified species belong to three distinct groups: a) psammophilous species spread chiefly on the beaches of the Horn of Africa and the Arabian Peninsula (*Neopachylopus secqi*, *Hypocaccus (H.) virescens*); b) endemic saproxylic species (*Eutriptus jirinae*, *Teretrius (Neoteretrius) dispar* sp. nov., *Pachycraerus socotrensis* sp. nov., and *Lio-pygyus occidentalis* sp. nov.); and c) widely spread, mainly saprobiont species (*Hypocacculus*

(*Colpellus praecox*, *Saprinus* (*S.*) *bicolor*, *S.* (*S.*) *caerulescens*, *S.* (*S.*) *chalcites*, *S.* (*S.*) *splendens*, *Atholus bicolor*, and *Platylomalus digitatus*). Higher taxa of the unidentified species can be likewise divided into two groups: a) widely spread taxa (*Teretrius*, *Acritus*, and *Tribalus*) and taxa with limited distribution whose occurrence in Socotra is rather surprising (*Plegaderus*).

Although members of saproxylic *Liopygus* are distributed chiefly in southeast Asia, there are *Liopygus* species found also in south or north India, respectively (see MAZUR 2011). The presence of *Liopygus* on the island of Socotra is of biogeographic significance as it considerably broadens the distribution of the genus.

Arguably, the most interesting is the discovery of a member of the genus *Plegaderus* on the island. *Plegaderus* belongs to the subclass of subcortical ‘micro-histerids’ found mostly in the forested zone of both the Palaearctic and Nearctic Regions. None species is known from the Arabian Peninsula or Africa for that matter, with the exception of *P.* (*P.*) *sanatus sanatus* Truqui, 1852 reported from Algeria and Morocco (MAZUR 2011). This taxon must have colonized the island from the north, and its puzzling presence on the island of Socotra raises the probability of discovering additional species in the Arabian Peninsula.

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