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# Apionidae, Nanophyidae, Brachyceridae and Curculionidae except Scolytinae (Coleoptera) from Socotra Island

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**Abstract.** This contribution deals with a total of 71 species of the curculionoid families Apionidae, Nanophyidae, Brachyceridae and Curculionidae (except for Scolytinae) recorded from Socotra Island, based on both literature and new records. The following twelve new genera of Curculionidae are described: Armifemur gen. nov. (type species A. pusillus sp. nov.), Bezdekiellus gen. nov. (type species B. lucidulus sp. nov.), Elwoodius gen. nov. (type species E. barbatus sp. nov.) and *Hajekia* gen. nov. (type species *H. microps* sp. nov.) in Cossoninae: Dryotribini; Dipnotyphlus gen. nov. (type species: D. laminiscapus sp. nov.) in Cossoninae: Onycholipini; Parvorhynchus gen. nov. (type species: P. sordidus sp. nov.) in Entiminae: Otiorhynchini; Ericiates gen. nov. (type species: E. cinereus sp. nov.), Nesotocerus gen. nov. (type species: N. rectus sp. nov.), Socotracerus gen. nov. (type species: S. delumbis sp. nov.), Socotractus gen. nov. (type species: S. peteri sp. nov.), and Tuberates gen. nov. (type species: T. pustulatus sp. nov.) in Entiminae: Peritelini; *Hagherius* gen. nov. (type species *H. sculptus* sp. nov.) in Conoderinae: Menemachini. The following 51 new species are described and illustrated: Afrothymapion maculiferum sp. nov., Armifemur pusillus sp. nov., Bezdekiellus lucidulus sp. nov., Cossonus krali sp. nov., C. ochreipennis sp. nov., Dipnotyphlus laminiscapus sp. nov., Elwoodius barbatus sp. nov., Endeochetus crassirostris sp. nov., E. helenae sp. nov., E. maculifer sp. nov., E. minimus sp. nov., E. parvus sp. nov., E. pressicornis sp. nov., E. rugulithorax sp. nov., E. saccofrancisci sp. nov., E. simillimus sp. nov., E. simplex sp. nov., Epactus auromaculatus sp. nov., E. hirticornis sp. nov., E. hispidus sp. nov., Ericiates cinereus sp. nov., Hagherius sculptus sp. nov., Hajekia elongata sp. nov., H. hirticula sp. nov., H. hispidirostris sp. nov., H. lucida sp. nov., H. microps sp. nov., H. opaca sp. nov., H. parvopunctata sp. nov., Marvaldiella insularis sp. nov., M. truncata sp. nov., Mechistocerus inornatus sp. nov., Mesoxenomorphus rugipennis sp. nov., Molybdotus minor sp. nov., M. mixtus sp. nov., M. viridiaureus sp. nov., Nematocerus barbitibia sp. nov., N. spinifemur sp. nov., Nesotocerus complanatus sp. nov., N. griseovestitus sp. nov., N. labeculatus sp. nov., N. rectus sp. nov., Parvorhynchus sordidus sp. nov., Sibinia caldaraedicata

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sp. nov., Socotracerus contortipes sp. nov., S. delumbis sp. nov., Socotractus micans sp. nov., S. peteri sp. nov., Systates hlavaci sp. nov., S. spinipennis sp. nov., and Tuberates pustulatus sp. nov. The following new combinations are established: Nematocerus globosus (Gestro, 1892), comb. nov., N. humerosus (Gestro, 1892), comb. nov., and Socotractus angusticollis (Taschenberg, 1883), comb. nov. (all from Systates Gerstaecker, 1871), and Molybdotus vermiculosus (Waterhouse, 1881) comb. nov. (from Piazomias Schoenherr, 1840). Caenocotaster Voss, 1971, stat. nov., is promoted to genus from subgenus of Cotaster Motschulsky, 1851. The new substitute name Cossonus alphonsephilus nom. nov. is proposed to replace Cossonus gibbirostris Hustache, 1936, not Cossonus gibbirostris Roelofs, 1875. Keys to species of Hajekia gen. nov., Nesotocerus gen. nov., Endeochetus Kolbe, 1898, to Socotran Molybdotus Fairmaire, 1882, and to Socotran Peritelini genera are given.

**Key words.** Coleoptera, Curculionoidea, Apionidae, Nanophyidae, Brachyceridae, Curculionidae, new genera, new species, replacement name, new combinations, taxonomy, new records, Yemen, Socotra

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#### Introduction

The superfamily Curculionoidea comprises more than 62,000 species and around 6,000 described genera (Thompson 1992; Kuschel 1995; Farrell 1998; Alonso-Zarazaga & Lyal 1999, 2002, 2009; Lyal & Alonso-Zarazaga 2006; Oberprieler et al. 2007), being, along with the Staphylinoidea, one of the most speciose of all the beetle superfamilies. However, its higher classification is highly controversial, the number of the Curculionoidea families varies from 7 (Oberprieler et al. 2014) to 23 (Alonso-Zarazaga & Lyal 1999), so Zimmerman's (1994: xviii) sentence: 'taxonomic systems in use today... are remarkably poor and unworkable' is still relevant today. In this paper I primarily follow the family classification proposed by Alonso-Zarazaga & Lyal (1999) which rightly emphasizes differences and affinities in this hyperdiverse superfamily, instead of the over-lumping scheme proposed by Oberprieler et al. (2014).

Although some partial revisionary studies were published in the last 50 years, the Afrotropical as well as the Oriental weevil fauna are still very poorly known. Of the few publications on the African Curculionoidea, most date back to before the 1970s, and most focus on a few areas of the continent, namely parts of southern Africa and a few mountain ranges in central Africa.

In the past, only a small number of papers were published on the Socotran Curculionoidea. The first was by Waterhouse (1881) who described a single curculionid. Two years later Taschenberg (1883) added another weevil, and reported the presence of an undescribed curculionid (perhaps an *Endeochetus* Kolbe, 1898) plus that of a brentid, bringing the number of known Socotran Curculionoidea to three named species; this was repeated by Gahan (1903). Guichard (1992) reported the presence of 6 species of weevils on the island, without naming any of them. Some years later Perrin (2000), while describing *Endeochetus canui*, indicated four additional weevil species from Socotra, one of which was identified only at genus level, plus one already known from the island. Quite recently, Wranik (2003) listed five Curculionoidea, of which two named merely at generic level, and illustrated ten species, some of which are described in the present paper. Most recently, a new species of *Aglycyderes* Westwood, 1864 (Belidae) was published by Knížek (2012b), and three new Scolytinae species were described by Knížek (2010, 2012a).

The exploration of the island carried out primarily by Czech expeditions during the years 2001–2012 raised the number of known Curculionoidea from 6 to 71 species, including the ones which could be named only at generic level in this paper. Surely, additional field research

will detect more new species, although what was so far have revealed quite a diverse, rich and to some extent unexpected weevil fauna. This paper deals only with weevils of the families Apionidae, Nanophyidae, Brachyceridae and Curculionidae (except Scolytinae) from the island of Socotra, excluding those from the small neighbouring islands of the archipelago; of these, weevils are known only from Abd-el-Kuri where two as-yet unnamed species have been listed, one of the tribe Peritelini (as *Systates*? sp. in Gahan 1903) and one of *Molybdotus* Fairmaire, 1882 (as *Piazomias* sp. in Gahan 1903).

The main obstacle to the study of the abundant material at hand from Socotra was, as already discussed, the present inadequate state of knowledge of many groups, particularly the Cossoninae and the Entiminae, with a general absence of modern taxonomic studies and only a few geographically restricted revisions. It was necessary to study extensive literature in order to discover the affinities of some species, which in general appear to be only rather distantly related to the Afrotropical and Oriental ones. As a rule, new species were assigned to already described genera whenever possible, and use of often poorly defined subgenera proposed by some 'prolific' authors in the past was avoided. Species represented by singletons were in general not described, but await collecting of further examples in order to study their variability, which is essential to differentiate them from close taxa of their genera.

#### Material and methods

In addition to the copious material from the Prague Museum, specimens from Pavia University, the Carmagnola Museum, the Institut Royal des Sciences Naturelles de Belgique, and the collections of the author and of Pietro Lo Cascio were included to make this note as complete as possible. Type material of two previously described species were sent by The Natural History Museum, London, United Kingdom and the Martin-Luther-Universität, Zentralmagazin naturwissenschaftlicher Sammlungen, Halle-Wittenberg, Germany. Material was collected by sweeping, beating, hand collecting, litter sifting, Malaise and pitfall traps. It is worth noting that the vast majority of the specimens from Roberto Sindaco was collected using long-lasting pitfall traps, a very effective technique to collect otherwise elusive species, but having the disadvantage that quite often the specimens are damaged by other arthropods that fall in the traps.

Families, tribes and genera are listed as in Alonso-Zarazaga & Lyal (1999), where genera within families and tribes are treated in alphabetical order. Species within each genus are treated here according to their relatedness.

Measurements are taken as explained in Borovec et al. (2009), and the total length of specimens does not include the rostrum. Terminology, particularly that of rostral regions, follows VAN DEN BERG (1972), OBERPRIELER (1988) and THOMPSON (1968, 1992).

Wild M5 and Olympus SZH10 microscopes, up to 108× magnification, were used to study the insects. To extract genitalia, specimens were softened by boiling them for a few seconds or using the method suggested by Sacco (1984). Genitalia were left in KOH 10% solution for some minutes, then cleaned and mounted in DMHF on a transparent card pinned under the card bearing the specimen, or glued dry to the same mounting card as the insect.

Photographs were taken by the author with a JVC CC-XI digital camera attached to a Wild M5 microscope, or by Francesco Sacco with a Nikon D90 camera and an AF Micro Nikkor 60 mm objective, or by Luca Quattrocchi and the author with a Leica Z16 APO microscope and the associated program Leica Application Suite 3.1. All pictures were then edited using the programs Helicon Focus and Adobe Photoshop PS4.

Labels of specimens are quoted verbatim, a double slash separating lines on the same label. Some locality names have been written by the collectors in different ways, although evidently referring to the same spot, as there is no standardized way of writing the Socotran language. Alternative spellings of localities are listed by Bezděk et. al. (2012).

Abbreviations of the specimens depositories are as follows:

ECRI Enzo Colonnelli collection, Rome, Italy;

IRSB Institut Royal de Sciences Naturelles de Belgique, Brussels, Belgium;

JBPC Jan Batelka collection, Prague, Czech Republic;

MCCI Museo Civico di Storia Naturale, Carmagnola, Italy:

MLUH Martin-Luther-Universität, Zentralmagazin naturwissenschaftlicher Sammlungen, Halle-Wittenberg, Germany:

MUPI Museo di Storia Naturale, Università degli Studi di Pavia, Italy;

NMPC Národní muzeum, Praha, Czech Republic;

PLFG Pietro Lo Cascio and Flavia Grita collection, Lipari, Italy.

#### **Systematics**

## Family APIONIDAE Tribe Aspidapiini

#### Pseudaspidapion brunneorufum (Balfour-Browne, 1945)

**Material examined** (1 spec.). **YEMEN:** SOCOTRA ISLAND: Hadiboh env., 10–100 m, 12°65′02″N 54°02′04″E, 21.xi.-12.xii.2003, 1 ♂, D. Král leg. (NMPC).

Distribution. East Africa, Yemen and India (Wanat 1990a). First record from Socotra Island.

#### Tribe Kalcapiini

# Afrothymapion maculiferum sp. nov.

(Figs 1-5)

Type material. Holotype:  $\circlearrowleft$  (NMPC), 'Yemen, Socotra Isl., // Dgisfu valley, 2.vi.2010 // N 12°28,444', E 054°08,596' // V. Hula & J. Niedobová leg.'. Paratypes:  $1 \circlearrowleft$ , same label data as holotype (NMPC);  $2 \circlearrowleft$ , 'Yemen, Socotra Isl., Homhil (= Hamaderon) // GPS 12.587 N, 54.302 E, 330 m, // 20-21.xi.2000 // V. Bejček & K. Šťastný' (NMPC);  $1 \circlearrowleft$ , 'Yemen, Socotra Island, // Qalentiah env., 4-5.vi.2010, // slopes 5 km SE from Qaysoh, // 12°39,691'N, 53°26,658'E, // V. Hula & J. Niedobová leg.' (ECRI);  $2 \circlearrowleft \circlearrowleft$ , 'Yemen, Socotra island // Kazazhan area // shrubland on limestone; sifting // 10.vi.2012 // 12°33.8'N, 54°19.8'E, 540 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (1 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length 2.3 mm. Pitchy-brown, rather shining, moderately coarsely punctured. Antennae, femora and tibiae dark ferruginous. Dorsal vestiture of modera-

tely dense ochreous and brownish recumbent elongate scales, brownish ones more slender and forming four vague patches on pronotum and transverse median dark stripe on elytral intervals I to IV. Ventral side clothed with rather dense pale yellowish recumbent quite elongate scales which become hair-like toward middle of urosternites, particularly urosternite V (Figs 1–2).

Head. Rostrum as long as pronotum, slightly curved, somewhat strigose up to very near its apex, moderately widening above antennal insertion and faintly tapering towards apex. Antenna inserted in basal quarter of rostrum; scape moderately clubbed and as long as funicular antennomeres II+III; antennomere I of funiculus thicker than following ones and slightly longer than antennomere III; antennomeres III to VII progressively shorter, last clearly transverse; club large, shortly fusiform, about as long as antennomeres IV–VII. Space between eyes slightly convex, punctured and about as wide as half of rostral width; eyes large and slightly protruding from head convexity, surrounded by row of whitish hair-like scales.

*Pronotum* subtrapezoidal, about as long as wide, faintly constricted at apex, base slightly bisinuous, disc rather convex, coarsely punctured; scales pointing forward and leaving narrow bare median line, and with elongate pit in front of scutellum. Scutellum subtriangularly elongate, its base with very faint minute tubercles.

*Elytra* 1.28 times longer than wide, convex and with scutellar faint depression, maximum width at apical third; sides weakly curved at basal 2/3, then quite strongly jointly curved towards apex; humeri rather strong. Striae with elongate and catenulate punctures, bare. Interstriae slightly wider than striae, flat, moderately punctured.

Legs fairly elongate, femora clubbed, tibiae slightly curved at extreme base, then almost straight and moderately widening towards apex, not mucronate, tarsi relatively stout, claws minutely dentate at base.

*Ventral side*. Ventrites I and II convex and of about the same width at sides, ventrite II about as long as ventrites III+IV combined, ventrite V subtriangular with rounded apex (Fig. 3). *Male genitalia*. Aedeagus as depicted in Figs 4–5.

**Variability.** Females differ by their rostrum 1.50 times as long as pronotum with antennae inserted about at basal third. Pale scales of some specimens are subtriangular instead of narrowly elongate and pronotal spots may be not present, whereas elytral markings are always visible, although more or less developed.

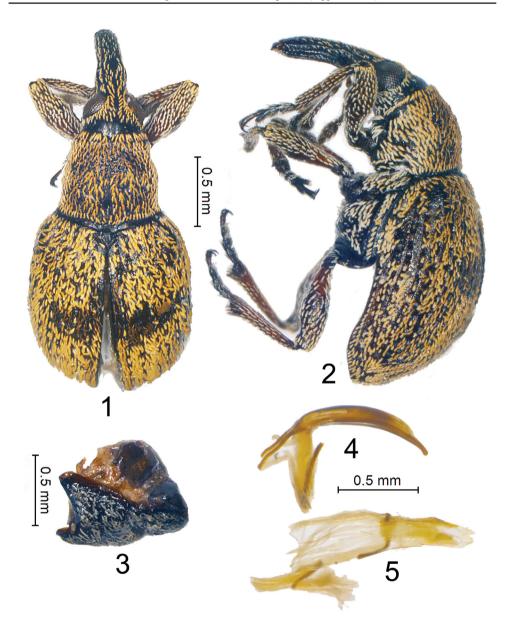
Body length 2.3-2.5 mm.

**Differential diagnosis.** Afrothymapion maculiferum sp. nov. is immediately recognisable from other species of the genus by its brown elytral markings and more or less dark ferruginous femora and tibiae. All other *Afrothymapion* have rather uniform vestiture and usually piceous body, although the integument of e.g. *A. tanganum* (Hartmann, 1897), occurring in the Arabian Peninsula (Wanat 1990a), can sometimes be testaceous even in mature specimens. Specimens cited by Perrin (2000: 425) as *Apion* sp. almost certainly belong to *Afrothymapion maculiferum* sp. nov.

**Etymology.** The species name is Latin adjective *maculifer* (-a, -um) meaning 'with a spot, bearing a spot' and was chosen in reference to the elytral markings of the new species.

**Distribution.** Endemic to Socotra Island.

Comments to classification. After the papers by Voss (1955a, 1959a,b, 1961, 1965, 1966a,b) aiming to a better arrangement of the diverse members of this family particularly from Africa, the key revisionary study by ALONSO-ZARAZAGA (1990) of the Palaearctic Apionidae gave great



Figs 1–5. Afrothymapion maculiferum sp. nov., holotype. 1 – habitus; 2– habitus in side view; 3 – abdomen; 4 – aedeagus in dorsal view; 5 – aedeagus in side view.

importance to the hitherto neglected male pygidial and aedeagal features for distinguishing tribes and genera. Despite some criticism by other authors (e.g. Ehret 1997, Gønget 1997, Colonnelli 2003) against the excessive fragmentation into several genera and subgenera of clearly intimately related taxa, a division moreover based on the study of only a relatively small number of the world species, most subsequent authors (e.g. Korotyaev 1985, 1987, 1992; Wanat 1990a,b; Kissinger 2002, 2005) have primarily used the same male characters to describe additional taxa, often when merely dealing with regional faunas. This has resulted in the taxonomy of both African and Oriental Apionidae, not to mention the Australian and American ones, remaining inadequately understood, and in the difficulty of placing the described and the much more numerous undescribed species in the proper genus. Aedeagal characters alone do not in my opinion allow the establishment of genera, and evidence for this view is that Wanat, who published a contribution on the fauna of the Arabian Peninsula (Wanat 1990a), was unable to assign to genus the three females from Socotra reared from *Abutilon* sp. (Malvaceae) and cited by Perrin (2000). The new species is assigned with some confidence to *Afrothymapion* Wanat, 1990, of which it has the main features.

## Family NANOPHYIDAE Tribe Corimaliini

#### Allomalia setulosa (Tournier, 1867)

Material examined (24 spec.). YEMEN: SOCOTRA ISLAND: Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9′N 54°05.3′E, 1 ♀, J. Hájek leg. (NMPC); Noged plain (plain), Sharet Halma vill. env., 12°21.9′N 54°05.3′E, 1 ♀, P. Hlaváč leg. (NMPC); Deiqub cave, 12°23.1′N 54°00.9′E, 115 m, 12.vi.2012, 15 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (12 NMPC, 3 ECRI); Halla area, Arher, 12°33.0′N 54°27.6′E, 5 m, 9.−10. + 15.vi.2012, 5 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (4 NMPC, 1 ECRI); Dune Hayft (Noged), 24.ii.2009, 2 ♂♂, P. Lo Cascio & F. Grita leg. (1 PLFG, 1 ECRI).

Collection circumstances. The species is associated with *Tamarix* (Magnano et al. 2009); in Socotra Island swept from *Tamarix nilotica* (Ehrenb.) Bunge (J. Hájek, pers. comm.). Distribution. A variable species widely distributed from southeastern Russia across the Middle East, North Africa, Arabian Peninsula and Chad (Alonso-Zarazaga 2011). First record from Socotra Island.

# Family BRACHYCERIDAE Tribe Brachycerini

## Brachycerus sp. 1

**Material examined** (1 spec.). **YEMEN: Socotra Is**LAND: Hamadero 20.−21.xi.2000, 1 ♂, V. Bejček & K. Šťastný leg. (NMPC).

**Note.** Surely a new species of small size (6.3 mm), the base of the rostrum of which is surmounted by two strongly projecting tubercles, and the second urosternite is almost as long as the fourth. It belongs to the 'Merkmalgruppe C' of HAAF (1957a,b), comprising primarily southern African species which are all much larger, their size being not less than 8.5 mm (HAAF 1957a,b). **Genus recorded from Socotra for the first time.** 

#### Brachycerus sp. 2

Material examined (1 spec.). YEMEN: SOCOTRA ISLAND: Shibhon, 13.vi.2009, 12°28′15″N 53°68′31″E, 680 m, 1 ♀. L. Purchart leg. (NMPC).

**Note.** This is also most probably a new small-sized species (6.3 mm) very close to the preceding one.

Family CURCULIONIDAE Subfamily Cossoninae Tribe Cossonini

#### Cossonus Clairville, 1798

**Comments on classification.** The world fauna of the genus *Cossonus* Clairville, 1798, with over 300 species, is badly in need of revision, and most probably a future reviser will be forced to split them among different genera, not necessarily corresponding to the poorly defined 'subgenera' into which this taxon is currently in part divided; these are not used here.

**Nomenclature note.** During my study of Afrotropical *Cossonus* for comparison with Socotran taxa described below, I have discovered, that *Cossonus gibbirostris* Hustache, 1936 from Ethiopia (Hustache 1936b: 580) is a junior primary homonym of *C. gibbirostris* Roelofs, 1876 from Japan (Roelofs 1876: cxxxiv), and thus the new substitute name of *Cossonus alphonse-philus* **nom. nov.** in memory of Alphonse Hustache is here proposed for the Ethiopian species.

## Cossonus krali sp. nov.

(Figs 6, 8)

Type material. Holotype:  $\circlearrowleft$  (NMPC), 'Yemen, Soqotra Is., # 24-26.xi/2003 # Wadi Ayhaft, 190 m # N 12°36′38″ E 53°58′49″ # [GPS], David Král Igt.', 'Yemen - Soqotra 2003 # Expedition; Jan Farkač, # Petr Kabátek & David Král'. Paratypes: 9  $\circlearrowleft$  11  $\circlearrowleft$  3, 'Yemen, Socotra Island # Zemhon area, 270-350 m # N 12°30′58″ E 54°06′39″ # L. Purchart & J. Vybíral Igt.' (NMPC); 1  $\circlearrowleft$  3, 'Yemen, Socotra Isl., # Firmihin plato, 400-500 m, # N 12°28′46″, E 54°00′89″ # 18.-19.vi.2010, # V. Hula & J. Niedobová leg.' (NMPC); 1  $\circlearrowleft$  4, 'Yemen, Socotra Island # Firmihin, 400-500 m # N 12°28′27″, E 54°0′54″ # 22-25.vi.2009 # L. Purchart & J. Vybíral Igt.' (NMPC); 1  $\circlearrowleft$  4, 'Yemen, Socotra Island # Homhil, protected area # open woodland with Boswellia & # Dracaena trees; 10-11.vi.2012 # 12°34.5′N, 54°18.5′E, 360-500 m', 'Socotra expedition 2012 # J. Bezděk, J. Hájek, V. Hula, # P. Kment, I. Malenovský, # J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype*. Body length: 3.8 mm. Piceous, shining, bare, elytra and femora brown, tibiae dark ferruginous, antennae, apical uncus of tibiae and tarsi honey-red (Fig. 6).

Head. Rostrum 1.5 times longer than wide at its widest point, 1.25 times as long as head and half as long as pronotum, rather abruptly dilated at antennal insertion which is situated immediately apicad of middle, barely curved and slightly tapering towards apex in lateral view, dorsum minutely and quite sparsely punctured at base, little more so beyond antennal insertion. Scrobes moderately large, rather deep, smooth, and reaching lower margin of rostrum at distance from eyes little less than lesser diameter of eye. Antennae quite robust; scape hardly curved at base, apical half moderately clubbed; funicular antennomere I little wider than remaining antennomeres and hardly longer than wide; antennomeres II to VII progressively more transverse, antennomere VII more than twice broader than long; club large,

broadly fusiform and about as long as four preceding antennomeres. Head with moderately dense punctures up to impunctate and shiny vertex. Eyes quite large, subelliptical and little protruding from head convexity. Space between eyes sulcate.

*Pronotum* as long as wide, moderately constricted at apex; sides, apical constriction and central sulcus with rather dense and coarse punctures; disc rather flat, with sparse and minute punctures on both sides of narrowly triangular middle shallow sulcus bearing trace of longitudinal irregular low carina; sides moderately curved, maximum pronotal width at basal fifth; basal margin barely bisinuate and much wider than truncate apical one. Scutellum small.

*Elytra* twice as long as wide, maximum width at humeri, sides converging in almost straight line from humeri toward apical declivity. Striae sulciform, with large deep subrectangularly elongate punctures. Intervals almost flat, not wider than striae and with irregular row of almost invisible microscopic punctures.

*Legs*. Femora clubbed, their dorsal margin more strongly curved than lower one, profemora larger than meso- and metafemora; tibiae slightly bisinuous, protibiae with internal margin slightly incised just apicad of middle; tarsi narrow, tarsomere III not bilobed.

*Ventral side* with rather dense round deep punctures, metaventrite and abdominal ventrite I shallowly sulcate.

**Variability.** Apart from immatures which are more or less entirely brownish, colour of antennae and legs varies from piceous to ferruginous. There is also some variation regarding density and size of the pronotal punctures. Females are difficult to distinguish from males.

Male genitalia. Aedeagus as depicted in Fig. 8.

Body length 3.2-4.6 mm.

**Differential diagnosis.** This new species is similar only to the South African *C. africanus* Boheman, 1845, both sharing an almost entirely piceous integument, nearly invisible punctures on elytral intervals, not sulcate rostrum, finely punctured disc on both sides of the carinate central sulcus. However, *C. africanus* differs by having maximum pronotal width a little basad of middle instead at basal fifth, elytra at base trisinuate instead of almost straight, elytral intervals faintly coriaceous and wider than striae instead of smooth and not wider than striae (BOHEMAN 1845, MARSHALL 1905). No other African or Oriental species can be confused with *C. krali* sp. nov.

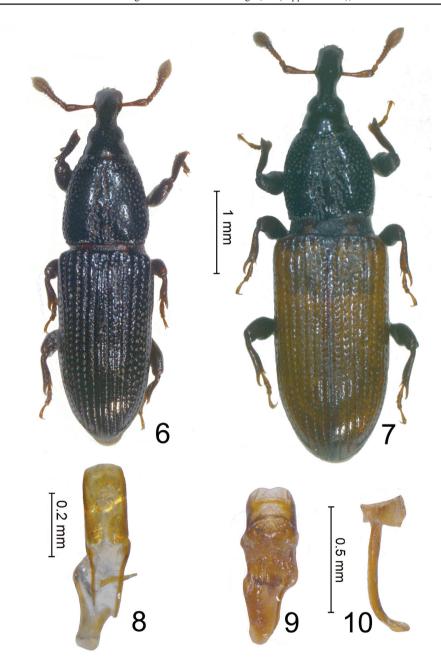
**Etymology.** The species is named after the Czech entomologist David Král (Prague, Czech Republic) who collected the absolute majority of the adults of the new species.

**Distribution.** Endemic to Socotra Island.

#### Cossonus ochreipennis sp. nov.

(Figs 7, 9, 10)

Type material. HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra island // Al Haghier Mts. // Skant Mt. env. 1450 m // 12°34.6′N, 54°01.5′E // J. Bezděk leg. 12-13.xi.2010'. PARATYPES: 37 ♂ 39 ♀♀, same label data as holotype (63 NMPC, 13 ECRI); 8 ♂ 6 ♀♀, 'Yemen, Socotra Island, // Al Haghier Mts., // Skant Mt. env., 1450 m, // 12°34.6′N, 54°01.5′E, // L. Purchart leg., 12-13.xi.2010 // Alcohol 70% + acetic acid' (11 NMPC, 3 ECRI); 1 ♂ 1 ♀, 'Socotra Is. (YE) // Al Haghier Mts. Skant Mt. env. // 12°34.6′N, 54°01.5′E, 1450 m // Jan Batelka leg. 12-13.xi.2010' (JBPC); 5 ♂ 8 ♀♀, 'Yemen, Socotra Island // Dixam plateau // Firmihin (*Dracaena* forest) // 12°28.6′N, 54°01.1′E, 490 m // Jan Batelka leg. 15-16.xi.2010' (9 JBPC, 3 ECRI); 3 ♀♀, 'Yemen, Socotra island // 12°28.6′N, 54°01.1′E, 490 m // Jan Batelka leg. 15-16.xi.2010' (9 JBPC, 3 ECRI); 3 ♀♀, 'Yemen, Socotra island //



Figs 6-10. 6, 8- Cossonus krali sp. nov. 6- habitus of the holotype; 8- aedeagus of a paratype in dorsal view. 7, 9-10- Cossonus ochreipennis sp. nov. 7- habitus of the holotype; 9- aedeagus of a paratype in dorsal view; 10- spiculum gastrale of the same.

Dixam plateau 14-15.vi.2012 // Firmihin, Dracaena woodland // 12°28.6′N, 54°01.1′E, 490 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 2  $\stackrel{>}{\sim}$  1  $\stackrel{<}{\sim}$ , 'Yemen, Soqotra Is. // Homhil protected area // 28-29/xi.2003, 364 m // N 12°34′27″, E 54°18′32″ // [GPS]; David Král lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 6  $\stackrel{>}{\sim}$  3  $\stackrel{>}{\sim}$  7  $\stackrel{<}{\hookrightarrow}$ , 'Yemen, Socotra Island // Wadi Zirik, 650-670 m // N 12°29′35″, E 53°59′28″ // 16.vi.2009 // L. Purchart lgt.' (10 NMPC, 2 BMNH, 1 ECRI); 4  $\stackrel{>}{\sim}$  3  $\stackrel{>}{\sim}$  2  $\stackrel{>}{\hookrightarrow}$ , 'Yemen, Socotra Island // Firmihin, 400-500 m // N 12°28′27″, E 54°0′54″ // 22-25. vi.2009 // L. Purchart & J. Vybíral lgt.' (5 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length: 4.6 mm. Piceous, shining, bare, femora brown, elytra ochreous-red with their extreme base little darker, antennae, tibiae and tarsi honey-red (Fig. 7).

Head. Rostrum twice as long as wide at its widest point, 1.54 times as long as head and 0.57 as long as pronotum, abruptly dilated at antennal insertion which is situated immediately basad of middle, slightly curved and a little tapering towards apex in lateral view, dorsum sparsely minutely punctured and somewhat sulcate on basal half. Scrobes moderately large, deep, smooth, and reaching lower margin of rostrum at distance from eyes a little more than diameter of an eye. Antennae relatively thin; scape scarcely curved at base and moderately clubbed in apical half; funicular antennomere I hardly broader than remaining ones and little longer than wide; antennomere II longer than wide; antennomeres III to VII moniliform and progressively more transverse towards club; club large, fusiform and about as long as four preceding antennomeres. Head with moderately dense punctures up to convex, impunctate and shiny vertex. Space between eyes with large central sulcus. Eyes rather large, subelliptical and moderately protruding from head convexity.

*Pronotum* as long as wide, a little constricted at apex, rather densely punctured except apical margin which is impunctate, glossy and strictly appressed on head; disc little convex on sides of middle sulcus and here with punctures not much smaller and sparser than those on rest of disc, central shallow sulcus large and with irregular low middle keel; sides moderately curved, maximum pronotal width just basad of middle; basal margin barely bisinuate and much wider than truncate apical one. Scutellum quite large, black.

*Elytra* 1.93 times longer than wide, maximum width at humeri, sides straight and hardly converging toward apical declivity. Striae sulciform, with large deep subquadrate punctures. Intervals almost flat, barely wider than striae and impunctate.

*Legs*. Femora clubbed, their dorsal margin slightly more curved than ventral one, profemora moderately larger than meso- and metafemora; tibiae slightly bisinuous, protibiae with internal margin more strongly incised than in preceding species; tarsi narrow, tarsomere III not bilobed.

*Ventral side* with rather dense round deep punctures, metaventrite sulcate, abdominal ventrite I shallowly depressed.

Variability. All specimens are very similar to the holotype. Some size variation of the tiny punctures of pronotal smooth discal areas occurs; a few of the specimens have a poorly-visible trace of a longitudinal groove on the dorsum of the rostrum, and some others have suture and apex of elytra slightly darker than the rest of elytral surface. Rostrum of females is 2.65 times longer than wide and widest at antennal insertion which is situated about at basal third, and apical two thirds of rostrum are only slightly more dilated than basal third.

Male genitalia. Aedeagus and spiculum gastrale as depicted in Figs 9 and 10.

Body length 3.4-5.2 mm.

**Differential diagnosis.** Elongate rostrum is clearly dilated on apical half in males and only slightly so in females. Finely punctured smooth discal areas, and impunctate elytral intervals make this species rather different from any of the described African Cossonus with piceous integument and rusty-red elytra. The only two species with reddish elytra and blackish pronotum occurring in the nearby countries are C. tarsalis Hustache, 1936 from Ethiopia, and C. procerus Gerstaecker, 1871 from Tanzania. The latter is however much larger (7.5–8.0 mm) than the new species and, besides its carinate rostrum, also has reddish abdomen and legs (Gerstaecker 1871). Cossonus tarsalis is readily separated from C. ochreipennis sp. nov, by profemora of males densely pubescent along the internal margin, base of pronotum strongly bisinuous, the small sunken scutellum, and elytra always with piceous suture and lateral intervals (Hustache 1936b). According to their descriptions (Walker 1859, MARSHALL 1938), the new species appears more similar to C. disciferus (Walker, 1859) from Ceylon and to C. divisus Marshall, 1938 from southern India and Ceylon. Cossonus divisus differs by having markedly shorter rostrum with strongly dilated apical half and central impression of pronotum not carinate. Cossonus disciferus has the rostrum elongate as in C. ochreipennis sp. nov., but is distinguished by the apex of the rostrum and legs red-brown instead of piceous, suture and apex of elytra black, and median impression of pronotum interrupted in the middle and not carinate. This species was illustrated by Wrank (2003: pl. 178, fig. h) as 'Cossonus sp.'

**Etymology.** The dirty yellowish colour of the elytra of the new species suggested its name; the Latin adjective *ochreipennis* (-is, -e) means 'with ochre wings'.

**Collection circumstances.** Most of the specimens were collected under bark of freshly fallen Dragon's blood trees (*Dracaena cinnabari* Balf. f., Asparagaceae), together with the tenebrionid *Corticeus socotranus* Purchart & Schawaller, 2012 (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

#### Marvaldiella Alonso-Zarazaga & Lyal, 1999

Comments on classification. Taxonomy of Cossoninae is in a state of flux at the moment. Despite the several papers by Voss (1934a,b, 1939, 1951, 1953, 1955b, 1956, 1957, 1971b) and Marshall (1905, 1937, 1956) particular for the African and Oriental fauna, and subsequent to the very outdated worldwide revision of the subfamily by Wollaston (1873), the morphological characters upon which several genera and even tribes proposed and listed by Alonso-Zarazaga & Lyal (1999, 2002) are based remain ambiguous. One can agree in principle with Alonso-Zarazaga (1989) about the rejection of 'genera of convenience' in the meaning of Balfour-Browne (1944), but the 'confused and inadequate taxonomy of Cossoninae' (Zimmerman 1956) suggests to use the already described genera in a broad sense. In consequence, the following new species are positively assigned to *Marvaldiella* Alonso-Zarazaga & Lyal, 1999, both the Socotran taxa differing essentially from the description of the genus by Fähraeus (1871) (under the name *Mimus* Fähraeus, 1871, a junior homonym replaced by *Marvaldiella*) only by the not very elongate funicular antennomere II, and narrow instead of dilated tarsomere III.

#### Marvaldiella insularis sp. nov.

(Figs 11, 13)

Type material. Holotype: ♂ (NMPC), 'Yemen, Soqotra Is., 2003 // 8-10/xii., Qalansiyah env. // Khayrha mts., N slopes // N 12°38′50″ E 53°27′45″ // 85-592 m [GPS], D. Král lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král'. Paratypes: 3 ♂ 2 ♀♀, same label data as holotype (3 NMPC, 2 ECRI); 1 ♀ 'Yemen, Soqotra 1s., // 24-26.xi/2003 // Wadi Ayhaft, 190 m // N 12°36′38″ E 53°58′49″ // [GPS], David Král lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 ♂, 'Yemen, Socotra Isl., 4.-5.vi. // Qualentiah env., 2010 // slopes 5 km SE from Quaysoh, // N 12°39.691′, E 53°26.658′ // V. Hula & J. Niedobová leg.' (NMPC); 1 ♀, 'Yemen, Socotra Island, // Deiqub cave env. // V. Hula & J. Niedobová leg. // 10.vi.2010' (NMPC); 1♀, 'Yemen, Socotra Island // Dixam plateau // Firmihin (*Dracaena* forest) // 12°28.6′N, 54°01.1′E, 490 m // Jiří Hájek leg. 15-16.xi.2010' (NMPC); 1♀, 'Socotra Is. (YE) Dixam plateau // Firmihin (*Dracaena* forest), 490 m // 12°28.6′N, 54°01.1′E // 15-16.xi.2010 Jan Batelka leg.' (JBPC); 4 ♂ 1♀, 'Yemen, Socotra Island // Zemhon area, 270-350 m // N 12°30′58″, E 54°06′39″ // 3-4.ii.2010, at light // L. Purchart & J. Vybíral lgt.' (3 NMPC, 1 BMNH, 1 ECRI); 1 ♂, 'Yemen, Socotra Isl., // Firmihin plato, 400-500 m, // N 12°28′46″, E 54°00′89″ // 18.-19.vi.2010, // V. Hula & J. Niedobová leg.' (NMPC); 3 ♂ 2♀♀, 'Yemen, Socotra Island // road between Airport and Hadiboh // 12°38′27″N 53°58′22″E, // 80 m, 2.vi.2012 // V. Hula & J. Niedobová leg.' (4 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length: 3.9 mm. Piceous, shining, bare, antennae and legs dark ferruginous (Fig. 11).

Head. Rostrum twice as long as wide, twice as long as head and 0.48 as long as pronotum, subcylindrical, slightly curved, rather sparsely minutely punctured on sides, dorsum smooth along midline. Scrobes thin, almost straight and directed immediately below eyes. Antennae fairly thin; scape weakly bisinuate and rather abruptly clubbed on apical third; funicular antennomere I little broader than remaining ones and longer than wide; antennomere II hardly longer than wide; antennomeres III to VII moniliform and progressively more transverse towards club; club large, shortly fusiform and about as long as three preceding antennomeres. Head with sparse very small punctures, vertex convex, impunctate and shiny. Space between eyes not sulcate. Eyes quite small, elliptical and barely protruding from head convexity. Pronotum 1.07 times longer than wide, hardly constricted at apex; punctation consists of large dense roundish punctures, smaller towards apical margin; disc with barely perceptible smooth midline; sides almost straight from base up to apical third, then moderately converging towards apex and moderately curved, maximum pronotal width at middle; basal margin barely bisinuate and little wider than truncate apical one. Scutellum large, subtriangular.

*Elytra* 1.71 times longer than wide, maximum width at middle, sides straight and hardly converging toward apical declivity where elytra are rounded together. Striae sulciform, with very large deep subquadrate punctures. Intervals almost flat, not wider than striae, and with irregular row of tiny punctures.

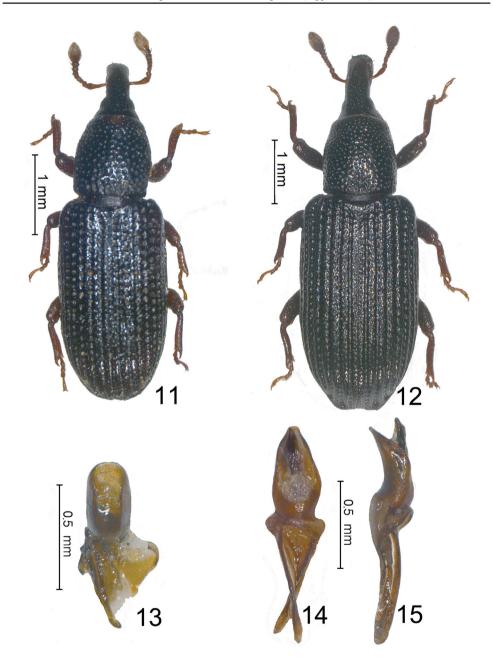
*Legs*. Femora moderately clubbed; tibiae rather short and weakly bisinuous; tarsi very narrow, tarsomere III not bilobed.

*Ventral side* with dense rather large round punctures, abdominal ventrites I and II shallowly depressed along midline.

Male genitalia. Aedeagus as depicted in Fig. 13.

**Variability.** Paratypes are almost identical to the holotype, apart from some variation of the cuticle colour due to the degree of maturity of the specimens. Females differ from males only by their rostrum being at least 2.4 times longer than wide.

Body length 3.5-3.7 mm.



Figs 11–15. 11, 13 – *Marvaldiella insularis* sp. nov.: 11 – habitus of the holotype in dorsal view; 13 – aedeagus of a paratype in dorsal view. 12, 14–15 – *Marvaldiella truncata* sp. nov.: 12– habitus of the holotype from above; 14 – aedeagus of a paratype in dorsal view; 15 – the same in side view.

Differential diagnosis. Among the seven described species of the African genus *Marvaldiella*, this new species is somewhat similar only to *M. usambarica* (Hartmann, 1904) from Tanzania, which is readily differentiated from the new species by its larger size (4.0–5.0 mm), rounded sides of pronotum, disc of the same with smooth somewhat raised midline and impunctate elytral intervals (Hartmann 1904, Voss 1965). *Marvaldiella insularis* sp. nov. differs immediately from the Ethiopian *M. freta* (Faust, 1895) by its elytra being the same colour as the pronotum instead of being rusty-red and hence contrasting with the piceous pronotum, the not furrowed rostrum and interocular space, the base of pronotum without impressions on the sides of the barely delimited (instead of obviously smooth) midline (Faust 1895, Voss 1965). All other species, some possibly erroneously included in this genus according to their descriptions (Hustache 1929, 1934), namely *M. glacialis* (Hustache, 1929) and *M. laevistriata* (Hustache, 1934) both from Kenya, are impossible to confuse with the Socotran one. Etymology. The name of the new species refers to its homeland, the island of Socotra; the Latin adjective *insularis* (-is, -e)' means insular.

**Distribution.** Endemic to Socotra Island.

## Marvaldiella truncata sp. nov.

(Figs 12, 14, 15)

Type material. HOLOTYPE: A (NMPC), 'Yemen, Socotra Island // Dixam plateau // Firmihin (Dracaena forest) // 12°28.6′N, 54°01.1′E, 490 m // Jiří Hájek leg. 15-16.xi.2010'. PARATYPES: 3 ♂♂ 2 ♀♀, same label data as holotype (4 NMPC, 1 ECRI); 6 ♂♂3 ♀♀, 'Socotra Is. (YE) Dixam plateau // Firmihin (*Dracaena* forest) // 12°28.6′N, 54°01.1′E, 490 m // Jan Batelka leg. 15-16.xi.2010' (6 JBPC, 3 ECRI); 1 ♀ 'Yemen, Soqotra Is., 2003 // 8-10/xii., Qalansiyah env. // Khayrha mts., N slopes // N 12°38′50″ E 53°27′45″ // 85-592 m [GPS], D. Král lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 ♀, 'Yemen, Soqotra Is., // 24-26.xi/2003 // Wadi Ayhaft, 190 m // N 12°36′38" E 53°58′49" // [GPS], David Král lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 4 🖧 🗘 🕻 'Yemen, Socotra Island // Zemhon area, 270-350 m // N 12°30′58", E 54°06′39" // 3-4.ii.2010, at light // L. Purchart & J. Vybíral lgt.' (5 NMPC, 1 BMNH, 2 ECRI); 3 🔗 1 🗣, 'Yemen, Socotra Island E // Kesa env., 220-300 m // N 12°39′37″, E 53°26′42″ // 28-29.i.2010, L. Purchart lgt.' (3 NMPC, 1 ECRI); 2 33, 'Yemen, Soqotra Isl., Qaariah // vill. env., 28.xi.2003, N 12°38'// 05" E 54°12'39", 11 m [GPS] // leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 2 33 'Yemen, Soqotra Isl., Wadi // Shederhed, 30.xi.2003, N // 12°36'11" E 54°08'07", 290 m // [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 3, 'Yemen, Soqotra Isl., Wadi // Ayhaft, 24-26.xi.2003, N 12°// 36'38" E 53°58'49", 190 m // [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 💍 Yemen, Soqotra Isl., Sirhin area // Dixam plateau, 1-2.xii.2003, N // 12°31′08″ E 53°59′09″, 812 m // [GPS], leg. P. Kabátek', 'Yemen - Sogotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 2 3/3/5 99, Yemen, Soqotra Isl., Homhil // protected area, 28-29.xi.2003 // N 12°34′27″ E 54°18′32″, 364 // m [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (5 NMPC, 2 ECRI); 1 ♀, 'Yemen, Socotra Island // road between Airport and Hadiboh // 12°38′27″N 53°58′22″E, // 80 m, 2.vi.2012 // V. Hula & J. Niedobová leg.' (NMPC).

**Description.** *Male holotype*. Body length: 5.0 mm. Piceous, shining, bare; antennae, tibiae and tarsi dark ferruginous (Fig. 12).

*Head*. Rostrum 2.10 times longer than wide, 2.09 times as long as head and 0.61 times as long as pronotum, subcylindrical, barely curved, dorsum quite sparsely minutely punctured. Scrobes thin, almost straight and directed immediately below eyes. Antennae relatively robust; scape short, weakly bisinuate and rather abruptly clubbed on apical half; funicular

antennomere I broader than remaining ones and hardly longer than wide; antennomere II subtriangular and little longer than wide; antennomeres III to VII moniliform and progressively more transverse towards club; club large, shortly fusiform and little longer than three preceding antennomeres. Head with rather sparse small punctures, vertex convex, shiny and finely strigose posteriorly to eyes. Space between eyes not sulcate. Eyes small, elliptical and barely protruding from head convexity.

*Pronotum* 1.07 times longer than wide, hardly constricted at apex; punctation consists of large dense roundish punctures, just little smaller towards apical margin; sides almost straight from base up to apical third, then moderately converging towards apex and barely curved, maximum pronotal width at middle; basal margin hardly convex and clearly wider than truncate apical one. Scutellum large, transverse.

*Elytra* 1.72 times longer than wide, maximum width at apical third, sides almost straight and hardly converging toward apical declivity, where elytra somewhat subtruncate. Striae sulciform, with large deep subquadrate elongate punctures. Intervals slightly convex, not wider than striae, and with irregular row of rather coarse punctures; interval III dilated and bulging at extreme apex, and here fused with interval IX.

*Legs*. Femora moderately clubbed; tibiae quite elongate and hardly bisinuous; tarsi very narrow, tarsomere III not bilobed.

*Ventral side* with dense rather large round punctures; abdominal ventrites I and II shallowly depressed along midline.

**Variability.** Paratypes are almost identical to the holotype, except some variation of the colour of appendages which is paler in some specimens. Females differ from males only by their rostrum at least 2.25 times longer than wide.

Male genitalia. Aedeagus as depicted in Figs 14 and 15.

Body length 4.2-5.0 mm.

**Differential diagnosis.** Large size, peculiar outline of elytral apex, and unusual shape of aedeagus with a central sharp projection (Figs 12, 14, 15) make it impossible to confuse this species with any other so far described congener. This species was illustrated by Wranik (2003: pl. 178, fig. i) as 'Curculionidae, not yet identified'.

**Etymology.** The species takes its name from the subtruncate apex of its elytra; the Latin adjective *truncatus* (-a, -um) means cut off, chopped off, or truncate.

**Distribution.** Endemic to Socotra Island.

## Tribe Dryotribini

#### Hajekia gen. nov.

Type species. Hajekia microps sp. nov., by present designation.

**Description.** Body small, elongate, very strongly punctured. Vestiture of head, pronotum and elytral disc consists of minute very sparse recumbent, almost invisible setae, which are semierect and a little longer on elytral declivity. Head globose. Eyes very small, strongly protruding, temples strongly narrowing towards eyes. Rostrum thick, curved, elongate, slightly dilated at apex, and almost continuing outline of head. Antennae elongate and inserted near apex of rostrum, scape sinuous and quite strongly widening beyond middle, funicle of five

antennomeres, antennomere I much longer than others which are all not transverse, club fusiform. Pronotum rather elongate, strongly constricted towards apex, apical margin moderately convex, base truncate. Scutellum minute. Elytra elongate and subparallel sided, shoulders absent. Striae formed by deep punctures, intervals keeled, and granulate at least on posterior third. Femora clubbed, edentate, slightly curved and quite compressed. Tibiae rather short and moderately thick, apical uncus fairly strong. Tarsi robust, tarsomere III bilobed, claws free. Procoxae more approached posteriorly than to anterior margin of prosternum, mesocoxae separated by interval at most equal to their diameter, metacoxae separated by distance from slightly less to slightly more than their diameter. Metaventrite truncate anteriad. Abdominal ventrites I and III elongate, suture between them barely visible, ventrites III and IV very short, their combined length about half of that of ventrite II, ventrite V rather elongate and crescent-shaped.

Differential diagnosis. This genus shares with the widespread *Dryotribus* Horn, 1873 size, general aspect, pentamerous funicle, small eyes, and suture between ventrites I and II obsolete (Horn 1873). *Hajekia* gen. nov. clearly differs from *Dryotribus* by antennae inserted in the apical third or apicad of it instead about in the middle of rostrum, eyes much smaller and protruding, and temples very strongly instead of moderately narrowing towards apex (Figs 16, 18, 20). The appearance of the new genus is also very similar to *Dryotribodes* Zimmerman, 1942 from the Pacific islands, but the latter has a heptamerous funicle (ZIMMERMAN 1942) and it is thus immediately distinguished from *Hajekia* gen. nov. There are no other Dryotribini which can be confused with this new genus, except the Socotran *Bezdekiellus* gen. nov. described below which clearly differs from *Hajekia* gen. nov. by its eyes reduced to a single ommatidium.

**Etymology.** The genus is named after Jiří Hájek who collected the two specimens of its type species. Gender is feminine.

# Hajekia microps sp. nov.

(Figs 16, 17, 19)

Type material. Holotype: 3 (NMPC), 'Yemen, Socotra island // Al Haghier Mts. // Skant Mt. env. 1450 m // 12°34.6'N E 54°01.5'E // Jiří Hájek leg. 12-13.xi.2010'. Paratype: 1 9, same label data as holotype (NMPC).

**Description.** *Male holotype*. Body length 2.8 mm. Brownish, opaque, antennae and tarsi honey-red, tibiae dark ferruginous. Semierect silvery setae are on internal margin of tibiae at apical fifth, and some similar ones can be seen on underside of apex of rostrum. Very thin slightly erect golden setae are very sparse on ventrites (Figs 16 and 17).

*Head.* Rostrum 1.94 times longer than wide at its widest point and 0.59 times as long as pronotum, slightly dilated at base, moderately curved and slightly tapering towards apex in lateral view, dorsum longitudinally and irregularly strigose up to antennal insertion, then microreticulate. Scrobes large, rather deep, smooth, and reaching base of head below eyes. Antennae inserted on apical quarter of rostrum. Head strigose like dorsum of rostrum.

*Pronotum* 1.08 times longer than wide, strongly constricted at apex as to appear collar-shaped, disc rather flat, with large coarse roundish punctures, sides almost parallel sided in middle and moderately curved towards apical constriction and towards base, widest basad of middle.

*Elytra* 1.78 times longer than wide, maximum width at middle. Striae formed by very large deep subrectangularly elongate punctures. Intervals in form of low narrow keels with a series of comparatively large granules in posterior third.

Legs. Femora relatively elongate, upper margin more strongly curved than lower one; tibiae both longitudinally and transversally slightly bisinuous, internal margin of protibiae with setose concavity at their apical third, that of meso- and metatibiae less pronounced, at apex with stout internal mucro besides strong external uncus.

*Ventral side* with large round deep coarse punctures, these much finer and irregular on ventrites III to V. Ventrites I and II with large shallow common depression.

Male genitalia. Aedeagus as depicted in Fig. 19.

**Variability.** The female is very similar to the holotype, apart from the lack of ventral depression. Body length 2.7 mm.

**Differential diagnosis.** Quite similar to *Hajekia parvopunctata* sp. nov. and *H. opaca* sp. nov., the descriptions of which follow, yet easily recognizable by its larger size, rostrum elongate and moderately dilated towards apex, much larger punctures on pronotum, elytral striae formed by large subrectangular punctures, and intervals with rather large granules. According to the description, possibly also *Dryotribus breviceps* Marshall, 1925 from Indonesia may belong to this or to a close new genus, although it is easily distinguished from the Socotran species by the antennae inserted just apicad of middle instead at apical quarter of rostrum, the greater distance of eyes from the anterior margin of pronotum, and the elytra widening towards apex.

**Etymology.** The species takes its name by the combination of the Greek nouns 'μικρός' (small) and ' $\mathring{\omega}$ ψ' (eye) in reference to its most salient feature; noun in apposition.

**Collection circumstances.** Sifted from leaf litter in montane evergreen woodland in the highest parts of the Hagher mountains (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

# Hajekia parvopunctata sp. nov.

(Fig. 18)

**Type material.** HOLOTYPE: ♀ (MCCI), 'Socotra (YE) // Homaq // 11.X.2007 - R. Sindaco'.

**Description.** *Female holotype*. Body length 2.1 mm. Brown, rather shining, antennae and tarsi honey-red, legs ferruginous. Almost invisible, nearly recumbent curved microscopic setae are arranged in a row on elytral intervals, and some long semierect silvery setae are on sides and on underside of apex of rostrum apicad of antennal insertion. Very thin slightly erect microscopic golden setae are sparse on ventral side (Fig. 18).

Head. Rostrum 1.73 times longer than wide at its widest point and 0.74 times as long as pronotum, scarcely narrowing from base to antennal insertion, then moderately dilated towards apex, dilated at base, slightly curved from base to antennal insertion and more strongly so apicad of it, slightly tapering towards apex in lateral view, dorsum longitudinally minutely and strigosely punctured. Scrobes large, rather deep, smooth and reaching base of head below eyes. Antennae inserted at apical quarter of rostrum. Head with same small strigose punctures as dorsum of rostrum, vertex alutaceous basad of eyes.

*Pronotum* 1.06 times longer than wide, rather strongly constricted at apex and somewhat collar-shaped, disc rather flat, with minute coarse roundish punctures, intervals between them microreticulate, sides slightly bisinuous in middle and rather abruptly curved towards apical constriction and towards base, widest point at basal third.

*Elytra* 1.70 times longer than wide, maximum width at apical quarter. Striae formed by moderately large deep round punctures. Intervals in form of low narrow keels with series of small granules more prominent on posterior third; subcarinate interval IX joined with interval III and only slightly protruding on apical quarter of elytral sides.

*Legs*. Femora relatively elongate, dorsal margin more strongly curved than ventral one; tibiae compressed and slightly bisinuous, at apex with small acute internal mucro besides strong external uncus.

Ventral side with quite large round deep coarse punctures, these much finer on ventrites III and IV.

**Differential diagnosis.** Although this species is quite close to the preceding one, it is readily separated from *H. microps* sp. nov. by its smaller size, shorter rostrum clearly dilated towards apex, much more densely and minutely punctured pronotum, small and roundish punctures of elytral striae and minutely granulate intervals. See the key below for differences from other Socotran species of *Hajekia*.

**Etymology.** The new species is named after the minute punctures of pronotum, its name is the Latin adjective *parvopunctatus* (-a, -um), meaning 'with small punctures'.

**Distribution.** Endemic to Socotra Island.

#### Hajekia opaca sp. nov. (Figs 22, 24)

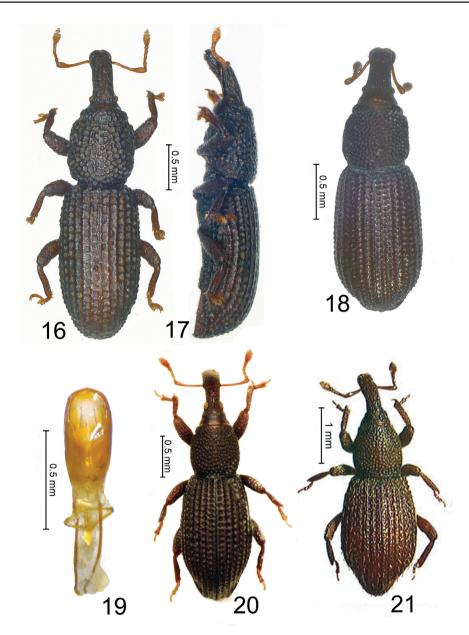
Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra island // Dixam plateau 14-15.vi.2012 // Firmihin, *Dracaena* woodland // 12°28.6′N, 54°01.1′E, 490 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 3 ♂♂ 3 ♀♀, same label data as holotype (NMPC); 'Yemen, Socotra Island // Bizidig // *Avicenna marina* mangrove, // 13.vi.2012 // 12°18.6′N, 53°48.2′E, 6 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (4 NMPC, 2 ECRI).

**Description.** *Male holotype*. Body length 1.9 mm. Brown, opaque, antennae and tarsi honey-red, legs ferruginous. Vestiture the same as in *H. parvopunctata* sp. nov. (Fig. 22).

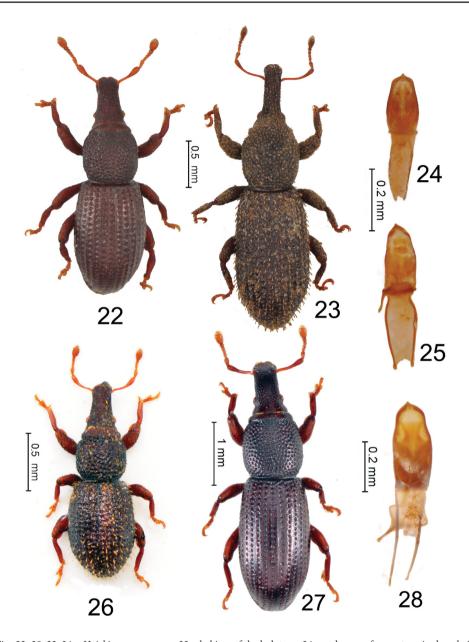
*Head.* Rostrum 1.54 times longer than wide at its widest point and 0.60 times as long as pronotum, scarcely narrowing from base to antennal insertion, then moderately dilated towards apex, dilated at base, slightly curved from base to antennal insertion and more strongly so apicad of it, slightly tapering towards apex in lateral view, dorsum alutaceous and very minutely punctured. Antennae inserted at apical fifth of rostrum.

*Pronotum* 1.05 times longer than wide, rather strongly constricted at apex and somewhat collar-shaped, disc rather convex, with moderately large coarse roundish punctures, intervals between them microreticulate, sides barely bisinuous in middle and rather abruptly curved towards apical constriction and towards base, widest point at middle.

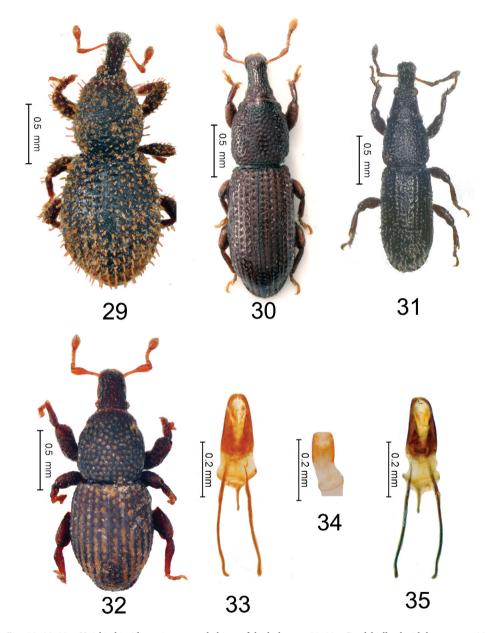
*Elytra* 1.47 times longer than wide, maximum width about at middle. Striae formed by large deep round punctures. Intervals in form of low narrow microreticulate keels; carinate



Figs 16–21. 16–17, 19 – *Hajekia microps* sp. nov., holotype 16 – habitus; 17– habitus in side view; 19 – aedeagus in dorsal view. 18 – *Hajekia parvopunctata* sp. nov., holotype. habitus. 20 – *Dryotribus mimeticus* (Horn, 1873), habitus of a specimen from Japan, picture available on http://kogane.wem.sfc.keio.ac.jp accessed December 27, 2011. 21 – *Cotaster cuneipennis* (Aubé, 1850), habitus of a specimen from France, picture by Claude Schott from www.claude. schott.free.fr accessed December 27, 2011.



Figs 22–28. 22, 24 – *Hajekia opaca* sp. nov. 22 – habitus of the holotype; 24 – aedeagus of a paratype in dorsal view. 23 – *Hajekia elongata* sp. nov., holotype, habitus. 25–26 – *Hajekia hirticula* sp. nov.: 25 – aedeagus of a paratype in dorsal view; 26 – habitus of the holotype. 27–28 – *Hajekia lucida* sp. nov.: 27 – habitus of the holotype; 28 – aedeagus of a paratype in dorsal view.



Figs 29–35. 29 – *Hajekia hispidirostris* sp. nov., habitus of the holotype. 30, 33 – *Bezdekiellus lucidulus* sp. nov.: 30 – habitus of the holotype; 33 – aedeagus of a paratype in dorsal view. 31, 34 – *Elwoodius barbatus* sp. nov.: 31 – habitus of the holotype; 34 – aedeagus of a paratype in dorsal view. 32, 35 – *Armifemur pusillus* sp. nov.: 32 – habitus of the holotype; 35 – aedeagus of a paratype in dorsal view.

interval IX joined with interval III and moderately protruding on apical quarter of elytral sides.

Legs as in Hajekia parvopunctata sp. nov.

*Ventral side* with quite large round deep coarse punctures, these much finer on ventrites III and IV. Metaventrite and abdominal ventrite I with quite large common depression.

**Variability.** Males are almost identical to the holotype. Females have rostrum a little thinner and longer and their abdomen is slightly convex instead of impressed.

Male genitalia. Aedeagus as depicted in Fig. 24.

Body length. 1.7–1.9 mm.

**Differential diagnosis.** This species is extremely close to *H. parvopunctata* sp. nov. due to its small size, minute punctures of upper surface and general appearance. *Hajekia opaca* sp. nov. differs from *H. parvopunctata* by the lack of granules on elytral interstriae, much more finely punctured female rostrum, a little shorter elytra and clearly more protruding interval IX at apex.

**Etymology.** The species name, Latin adjective *opacus* (-*a*, -*um*), of the new species refers to its opaque integument due to the coarse minute punctuation.

**Distribution.** Endemic to Socotra Island.

# Hajekia elongata sp. nov.

(Fig. 23)

**Description.** *Female holotype*. Body length 2.8 mm. Piceous, opaque, antennae and tarsi honey-red, apex of tibiae ferruginous. Semierect pale golden setae are in apical two thirds, and few similar minute ones are on underside of apex and on sides of rostrum. Very thin slightly erect golden setae are very sparse on ventrites (Fig. 23).

*Head.* Rostrum 2.77 times longer than wide at its widest point and 0.73 times as long as pronotum, slightly dilated at base, moderately curved and slightly tapering towards apex in lateral view, dorsum longitudinally and irregularly strigose up to antennal insertion, then microreticulate. Scrobes large, rather deep, smooth, and reaching base of head below eyes. Antennae inserted at apical quarter of rostrum. Head strigose like dorsum of rostrum.

*Pronotum* 1.09 times longer than wide, collar-shaped, disc rather convex, with quite small coarse roundish punctures, sides almost parallel sided in middle and moderately curved towards apical constriction and towards base, widest at middle.

*Elytra* twice as long as wide, maximum width at middle. Striae formed by very large deep subrectangularly elongate punctures. Intervals keeled and bearing row of semierect claviform elongate scales.

Legs. Femora relatively elongate, upper margin more strongly curved than lower one; tibiae both longitudinally and transversally slightly bisinuous, internal margin of protibiae

with setose concavity at their apical third, that of meso- and metatibiae less pronounced, at apex with stout internal mucro besides strong external uncus.

*Ventral side* with large round deep coarse punctures, these much finer and irregular on ventrites III to V. Ventrites I and II uniformly convex.

**Variability.** Other females are similar to the holotype, one of them has elytra slightly shorter and darker integument.

Body length 2.1–2.4 mm.

**Differential diagnosis.** This new species resembles *H. microps* sp. nov. in its relatively large size and elongate shape, but immediately differs by the even more elongate rostrum, pronotum and elytra, and the presence of obvious erect clubbed setae on elytral intervals. This last feature is shared with the smaller and plumper *H. hispidirostris* sp. nov. which has setae also on rostrum and pronotum, so cannot be confused with *H. elongata* sp. nov.

**Etymology.** The species name is Latin adjective *elongatus* (-a, -um), emphasizing the elongate body of the new species.

Distribution. Endemic to Socotra Island.

# Hajekia hirticula sp. nov.

(Figs 25, 26)

Type material. HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra island // Kazazhan area // shrubland on limestone; sifting // 10.vi.2012 // 12°33.8′N, 54°19.8′E, 540 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 4 ♂♂9 ♀♀, same label data as holotype (7 NMPC, 1 BMNH, 3 ECRI).

**Description.** *Male holotype*. Body length 1.5 mm. Brownish, matt, antennae, unci and tarsi honey-red, tibiae ferruginous, femora brownish-red. Tiny claviform yellowish scales arranged in row on each elytral interval. Very thin almost recumbent golden setae are sparse on ventrites (Fig. 26).

*Head.* Rostrum 1.45 times longer than wide at its widest point and 0.53 times as long as pronotum, basal two thirds almost straight, apical third slightly curved and barely tapering apically in lateral view. Antennae inserted at apical fifth of rostrum. Head and dorsum of rostrum alutaceous.

*Pronotum* 1.07 times longer than wide, collar-shaped, disc slightly convex, with moderately small coarse roundish punctures, sides almost parallel sided in middle and quite strongly curved towards apical constriction and towards base, widest point at basal third.

*Elytra* 1.37 times longer than wide, suboval, maximum width at middle. Striae formed by not very large, deep, subrectangular punctures. Intervals almost flat, rugulose, bearing row of semierect claviform elongate scales.

Legs relatively short but not differing in structure from other species of the genus.

*Ventral side* with moderately large, round, quite sparse punctures, these finer on ventrites III to V. Ventrites I and II slightly impressed.

**Variability.** Paratypes are very similar to the holotype. Females have longer rostrum and lack abdominal impressions.

Male genitalia. Aedeagus as depicted in Fig. 25.

Body length 1.4-1.8 mm.

**Differential diagnosis.** The smallest species of the genus. It is easy to recognise by its short rostrum, suboval elytra, and erect claviform scales on intervals. See also the key to species below.

**Etymology.** The species name, Latin adjective *hirticulus* (-*a*, -*um*), meaning 'small and setose', is given in reference to appearance of the insect.

**Collection circumstances.** Sifted from litter in a limestone ravine under *Ficus vasta* Forssk. (Moraceae) (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

# Hajekia lucida sp. nov.

(Figs 27, 28)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra island // wadi Thar di Itrur, 21.vi.2012 // sifting under *Ficus cordata* // 12°32.8′N, 53°42.9′E, 54 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 1 ♂ 1 ♀, same label data as holotype (1 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length 2.4 mm. Pitchy-brown, bare, head and pronotum alutaceous, elytra shining, antennae and legs dark ferruginous (Fig. 27).

Head. Rostrum 1.60 times longer than wide at its widest point and 0.60 times as long as pronotum, strongly curved at middle and weekly tapering at apical quarter in lateral view, dorsum with thin dense faintly strigose punctures. Scrobes rather thin, deep, smooth, and reaching basally middle of rostrum below. Antennae inserted at base of apical quarter of rostrum. Scape thin, moderately clubbed on apical third; funicular antennomere I thicker than others and twice as long as wide, antennomere II one and half times longer than wide; antennomeres III to V about as long as wide; club oval, setose, as long as three preceding antennomeres.

*Pronotum* 1.05 times as long as wide, widest at middle; disc rather flat, with fairly large dense roundish punctures, sides regularly curved towards apical constriction and towards base, apex slightly concave, base almost straight.

*Elytra* 1.78 times longer than wide, subparallel sided, maximum width at middle. Striae formed by quite large deep round punctures. Intervals flat and barely wider than striae.

Legs similar to those of other species of the genus.

*Ventral side* with rather large, not very dense punctures, except on ventrites III to V. Metaventrite and abdominal ventrite I with large common central depression.

**Variability.** The other male is very similar to the holotype, whereas the female differs by its rostrum slightly longer and thinner and abdomen with no impressions.

Male genitalia. Aedeagus as depicted in Fig. 28.

Body length 2.3-2.4 mm.

**Differential diagnosis.** The shining dorsal surface makes this species unmistakable among its congeners.

**Etymology.** The species name, Latin adjective *lucidus* (-*a*, -*um*), meaning bright, shining, or light, is given for the glossy surface of its integument.

**Collection circumstances.** Sifted from leaf litter under *Ficus cordata* Thunb. (Moraceae) (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

#### Hajekia hispidirostris sp. nov.

(Fig. 29)

Type material. Holotype: ♀ (NMPC), 'Yemen, Socotra island // Homhil, protected area // open woodland with *Boswellia & // Dracaena* trees; 10-11.vi.2012 // 12°34.5′N, 54°18.5′E, 360-500 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 1♀, same label data as holotype (ECRI); 1♀, 'Yemen, Socotra island // Kazazhan area // shrubland on limestone; sifting // 10.vi.2012 // 12°33.8′N, 54°19.8′E, 540 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Female holotype*. Body length 1.7 mm. Brownish, opaque, antennae, unci and tarsi honey-red, tibiae dark ferruginous. Erect, thin, yellowish claviform setae clothing all dorsal surface, dorsal margin of legs and sides of rostrum. Thin, slightly erect golden setae are very sparse on ventrites (Fig. 29).

*Head.* Rostrum 1.85 times longer than wide at its widest point and 0.70 times as long as pronotum, moderately dilated at apex, regularly curved and slightly widening towards apex in lateral view, dorsum alutaceous and faintly strigose at base. Scrobes large, rather deep, smooth, and reaching basally up to distance about equal to eye diameter. Antennae inserted at base of apical quarter of rostrum.

*Pronotum* about as long as wide, widest at basal third; disc rather flat, with large not very dense roundish punctures, sides almost curved towards apical constriction and towards base, apex slightly curved, base straight and little wider than apex.

*Elytra* 1.33 times as long as wide, oval, maximum width at middle. Striae formed by large rather deep irregular punctures. Intervals flat and not wider than striae.

*Legs*. Femora moderately elongate, upper margin more strongly curved than lower one; tibiae almost straight, internal margin of protibiae minutely setose on apical third.

Ventral side punctured, except ventrites III to V.

**Variability.** Other females are similar to the holotype, one of them is slightly immature and has integument pale brownish.

Body length 1.7–2.0 mm.

**Differential diagnosis.** A species distinguished at once by its setose dorsal surface, obvious clubbed setae on rostral sides, and oval shape of pronotum and elytra.

**Etymology.** The Latin name, *hispidirostris* (-is, -e), is a composite adjective referring to its setose rostrum.

**Collection circumstances.** Sifted from leaf litter under *Ficus vasta* Forssk. (Moraceae) in karstic terrain (J. Hájek pers. comm.).

**Distribution.** Endemic to Socotra Island.

#### Identification key to Hajekia species

1	Elytra twice as long as wide. Rostrum more than 2.5 times longer than wide. Interstriae with row of semierect claviform scales
_	Elytra and rostrum less than twice as long as wide2
2	Dorsal surface and legs with obvious erect claviform scales. Elytra oval, at base not wider
	than base of pronotum
_	At most only elytra with erect scales. Elytra more or less elongate, not oval
3	Elytra with erect claviform scales. Small size, not above 1.8 mm.
	H. hirticula sp. nov.
_	When present, scales on dorsal surface minute, inconspicuous, seta-like and almost re-
	cumbent. 4
4	Integument, particularly of elytra, glossy
_	Integument matt. 5
5	Larger than 2.5 mm. Body rather elongate, pronotal punctures almost as large and deep
	as those of elytral striae
_	Smaller than 2.5 mm. Body only moderately elongate, pronotal punctures smaller than
	those of elytral striae. 6
6	Elytral intervals minutely granulate, interval IX moderately convex and only a little pro-
	truding laterally on elytral apex
_	Elytral intervals alutaceous, interval IX quite strongly convex and moderately protruding laterally on elytral apex.  H. opaca sp. nov.  H. opaca sp. nov.

#### Bezdekiellus gen. nov.

**Type species.** Bezdekiellus lucidulus sp. nov., by present designation.

**Description.** Body small, very elongate, bare, rather strongly punctured, cuticle of dorsal surface shining, that of ventral side somewhat alutaceous. Head convex, subconical. Eyes reduced to single ommatidium. Rostrum thick, slightly curved at apical third, moderately elongate, slightly dilated at antennal insertion and almost continuing outline of head in lateral view. Antennae moderately elongate and inserted at apical quarter, scape hardly sinuous and moderately widening towards apex, funicle pentamerous, antennomere I somewhat thicker and obviously longer than others which are short and from antennomeres III to VII transverse; club large, oval. Pronotum elongate, constricted towards apex, apical and basal margins truncate. Scutellum invisible. Elytra elongate, subparallel sided, shoulders absent. Striae formed by large deep punctures, intervals narrower than striae. Femora clubbed, edentate and slightly curved. Tibiae quite short and straight, apical uncus strong. Tarsi not very narrow, tarsomere III bilobed, claws free. Procoxae separated and closer to posterior than to anterior margin of prosternum, meso- and metacoxae separated by an interval clearly wider than their diameter. Abdominal ventrites I and II elongate, suture between them straight, ventrites III and IV short, their combined length about half of that of ventrite II, ventrite V rather elongate and crescent-shaped.

**Differential diagnosis.** Although surely very close to *Hajekia* gen. nov., besides the dorsal surface entirely shining instead of at least in part alutaceous, this new genus differs readily from it as well as from all other pentamerous Dryotribini by the eyes formed by a single ommatidium difficult to see in some specimens. On the other hand, the eyeless Madagascan monobasic *Pentebathmus* Richard, 1956 is completely different from *Bezdekiellus* gen. nov. by its shortly oval elytra, maximum width of pronotum at apical quarter and subcarinate elytral intervals (RICHARD 1956).

**Etymology.** The genus takes its name from one of its skilled collectors, Jan Bezděk. Gender is masculine.

#### Bezdekiellus lucidulus sp. nov.

(Figs 30, 33)

Type material. HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra island // Kazazhan area // shrubland on limestone; sifting // 10.vi.2012 // 12°33.8′N, 54°19.8′E, 540 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. PARATYPES: 4 ♂ 3 4 ♀♀, same label data as holotype (4 NMPC, 1 BMNH, 3 ECRI); 2 ♂ 3 ♀♀, 'Yemen, Socotra island // Homhil, protected area // open woodland with *Boswellia &* // *Dracaena* trees; 10-11.vi.2012 // 12°34.5′N, 54°18.5′E, 360-500 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype*. Body length 1.9 mm. Shining, dark ferruginous, antennae and tarsi slightly paler (Fig. 30).

*Head.* Rostrum 1.64 times as long as wide at its widest point and 0.51 as long as pronotum, irregularly striolate on dorsum. Scrobes thin and deep, curving downward to reach just basad of middle of rostrum, their apical third visible from above. Head globular, short, impunctate.

*Pronotum* 1.18 times longer than wide, widest at basal quarter, moderately constricted at apex, quite abruptly so towards base; disc moderately convex, with large roundish dense punctures, sides subparallel in middle, moderately curved towards apical constriction and quite strongly rounded towards base.

*Elytra* 2.02 times longer than wide and 0.94 times narrower than pronotum, sides almost parallel, maximum width at apical quarter. Striae formed by rather large deep round punctures. Intervals narrower than striae, micropunctulate and slightly convex.

*Ventral side* with large round punctures, metaventrite, abdominal ventrites I and II with large common depression.

**Variability.** Aside from cuticle colour more or less dark, paratypes are almost identical to the holotype. The rostrum of females is little longer and thinner, and they lack abdominal depression.

Male genitalia. Aedeagus as depicted in Fig. 33.

Body length 1.9-2.0 mm.

**Etymology.** Also this species is named after the glossy surface of its integument, and the name additionally points to its similarity with *Hajekia lucida* sp. nov.; adjective (*lucidulus*, -a, -um). **Collection circumstances.** Sifted from leaf litter under *Ficus vasta* Forssk. (Moraceae) in karstic terrain (J. Hájek pers. comm.).

**Distribution.** Endemic to Socotra Island.

#### Elwoodius gen. nov.

**Type species.** *Elwoodius barbatus* sp. nov., by present designation.

**Description.** Body small, very elongate, rather strongly punctured, cuticle of head and pronotum alutaceous, that of elytra and underside quite shining. Vestiture of head, pronotum and elytra of rather sparse suberect capitate scales. Head elongate, not separated from rostrum by groove and not sulcate posteriorly to eyes. Eyes quite small, hemisphaerical and strongly protruding, temples much longer than diameter of eye and moderately conically narrowing towards eyes. Rostrum thick, curved, moderately elongate, slightly dilated at antennal insertion, and almost continuing outline of head in lateral view. Antennae elongate and inserted at middle of rostrum, scape hardly sinuous and rather moderately widening towards apex, funicle heptamerous, antennomere I little thicker than others which are short, antennomeres III-VII transverse, club shortly fusiform. Pronotum elongate, moderately constricted towards apex, apical margin a little convex, base truncate. Scutellum small. Elytra very elongate and subparallel sided, shoulders absent. Striae formed by deep punctures, intervals little convex. Femora clubbed, edentate, slightly curved and emarginate at apical third of inner margin. Tibiae quite short and moderately thick, apical uncus rather strong. Tarsi narrow, tarsomere III hardly bilobed, claws free. Procoxae widely separated and closer to posterior than to anterior margin of prosternum, meso- and metacoxae separated by an interval clearly wider than their diameter. Metaventrite truncate frontward. Abdominal ventrites I and II elongate, suture between them straight, ventrites III and IV very short, their combined length about half of that of ventrite II, ventrite V rather elongate and crescent-shaped.

**Differential diagnosis.** Also this genus can be considered somewhat similar only to *Dryotribus* among Dryotribini. To this tribe quite different-looking genera are currently assigned, the aspect of some of them approaches also some members of the Proecini. Among the five genera of Dryotribini with heptamerous funicle and elongate body, Elwoodius gen. nov. is readily isolated by its small size, erect scales, protruding eyes, head not separated from rostrum by any sulcus, not protruding humeri, and very elongate parallel sided elytra. Erect scales are present also in the Palaearctic Cotaster Motschulsky, 1851, but members of this genus are larger (2.0-2.5 mm), have shorter navicular elytra with alutaceous surface, eyes moderately protruding and temples hardly longer than the diameter of an eye (Fig. 21). Note that the South African Caenocotaster Voss, 1971, described as subgenus of Cotaster (Voss 1971a), is surely a self-standing genus (stat. nov.) on account of its 6-segmented funicle, rostrum only twice as long as wide, greyish vestiture of the dorsal surface, and short instead of long elytral hair-like scales. *Elwoodius* gen. nov. can be separated from *Dryotribodes* already by the intercoxal process of all coxae much wider than diameter of a coxa, the elongate temples in association with the not elevated elytral intervals III and V, and the smaller size (1.8 mm instead of 2.4–3.0 mm). The other Socotran dryotribine genera, *Hajekia* gen. nov. and Bezdekiellus gen. nov., have a quite different body shape and the antennae inserted near the apex of rostrum (Figs 16-18).

Etymology. The genus name is given in memory of the late American entomologist Elwood

Curtin Zimmerman, who published several papers and books of paramount importance to our knowledge of weevils. Gender is masculine.

#### Elwoodius barbatus sp. nov.

(Figs 31, 34)

Type material. HOLOTYPE: ♀ (NMPC), 'Republic of Yemen // Socotra Isl // Wadi Zirik 12.6.2010 // N 12°28.584', E 053°59.475' // Igt. V. Hula & Niedobová J.'. Paratypes: 1 ♀, same label data as holotype (NMPC); 4 ♂♂ 5 ♀♀, 'Yemen, Socotra Island // Bizidig // Avicennia marina mangrove, // 13.vi.2012 // 12°18.6'N, 53°48.2'E, 6 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (6 NMPC, 1 BMNH, 2 ECRI).

**Description.** *Female holotype*. Body length 1.8 mm. Piceous, antennae and tarsi ferruginous, tibiae dark ferruginous. Semierect whitish capitate hair-like whitish scales pointing forward are on rostrum, head and pronotum, whereas similar ones arranged in row on each of elytral intervals being almost perpendicular, longer, and pointed backward. Ventral side with sparse almost recumbent silvery setae (Fig. 31).

*Head.* Rostrum 1.90 times longer than wide at its widest point and 0.63 times as long as pronotum, slightly dilated at antennal insertion, curved and slightly widening towards apex in lateral view, dorsum microreticulate and barely convex. Scrobes rather thin and deep, little exceeding base of head below eyes. Antennae inserted at middle of rostrum. Head measured from base to anterior margin of eyes as long as rostrum.

*Pronotum* 1.07 times longer than wide, strongly constricted at apex as to appear collar-shaped, widest basad of middle; disc rather flat, microreticulate and with rather sparse roundish punctures, sides slightly sinuous in middle and moderately curved towards apical constriction and towards base.

*Elytra* 1.97 times longer than wide and just 1.10 times as wide as pronotum, sides almost parallel, maximum width at middle. Striae formed by rather large deep subrectangular punctures. Intervals quite smooth and slightly convex.

*Legs*. Femora relatively elongate, dorsal margin quite strongly curved; tibiae curved at base, then slightly widening towards apex.

*Ventral side*, except prosternum and ventrites III and IV, with rather large moderately dense roundish punctures, rest of surface quite shining.

**Variability.** Males are very similar to the holotype, differing only by their rostrum being slightly thicker, and the metaventrite and basal abdominal ventrites quite flat. Females are almost identical to the holotype.

Male genitalia. Aedeagus as depicted in Fig. 34.

Body length 1.8-2.1 mm.

**Etymology.** The species name, the Latin adjective *barbatus* (-*a*, -*um*) meaning bearded, is given in reference to the erect hair-like scales on the whole dorsal surface.

**Collection circumstances.** Specimens from Bizidig were sifted from decaying leaves on sand under an isolated stand of mangrove *Avicennia marina* (Forssk.) Vierh. (Acanthaceae) (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

#### Armifemur gen. nov.

**Type species.** Armifemur pusillus sp. nov., by present designation.

**Description.** Body very small, moderately elongate, rather strongly punctured, cuticle alutaceous. Vestiture of rather sparse microscopic and almost invisible, slightly erect short setae. Head very short. Eyes minute and strongly protruding. Rostrum thick, curved, moderately elongate, slightly tapering at antennal insertion, and not continuing outline of head in lateral view. Antennae quite short and inserted near apex of rostrum, scape thin at base and quite abruptly, strongly clubbed and slightly compressed at apical third, funicle heptamerous, antennomere I thicker and much longer than others which are short, cylindrical, antennomeres III-VII transverse, club large and shortly fusiform. Pronotum rather elongate, moderately constricted towards apex and base, apical margin a little convex, base subtruncate. Scutellum invisible. Elytra quite short with sides moderately rounded from base, shoulders absent. Striae formed by deep large round punctures, intervals thin and little convex. Anterior femora quite strongly clubbed, compressed and somewhat twisted, ventral margin edentate, dorsal one with keeled tooth near base, inner margin concave and smooth, distally keeled; metafemora similar to profemora, only less clubbed; mesofemora moderately clubbed, less compressed and lacking dorsal tooth. Tibiae short, moderately thick, and slightly sinuate, base particularly of posterior tibiae curved and clearly dilated, apical uncus strong. Tarsi quite short, tarsomere III evidently bilobed, claws free. Procoxae separated by distance about equal to diameter of one of them and with faint elongate tubercle in front of them giving impression of barely visible rostral channel, mesocoxae separated by twice their diameter, distance between metacoxae almost three times their diameter. Mesepimeron tuberculate. Ventrites I and II very elongate, barely visible suture between them straight, ventrites III and IV very short, their combined length about half of that of II, V slightly longer than two preceding ones and crescent-shaped.

**Differential diagnosis.** Impossible to confuse with any other Cossoninae by the dorsal tooth-like process of base of femora, in combination with the pentamerous antennal funicle and inner side of profemora excavated. However, it appears somewhat related with *Hajekia* gen. nov., sharing with it general shape and kind of habitat.

**Etymology.** The genus takes its name by the peculiar structure of the base of metafemora bearing a kind of dorsal tooth. Gender is masculine.

# Armifemur pusillus sp. nov.

(Figs 32, 35)

Type material. HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra island // Kazazhan area // shrubland on limestone; sifting // 10.vi.2012 // 12°33.8′N, 54°19.8′E, 540 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 2 ♂♂5 ♀♀, same label data as holotype (5 NMPC, 2 ECRI).

**Description.** *Male holotype.* Body length 1.5 mm. Dark brown, antennae and tarsi ferruginous, tibiae dark ferruginous (Fig. 32).

*Head.* Rostrum 1.14 times longer than wide at its widest point and 0.45 times as long as pronotum, moderately curved and just a little tapering towards apex in lateral view, dorsum

very finely irregularly strigose and slightly convex. Scrobes only visible from underside of rostrum, deep and slightly sinuous, reaching base of lower margin of eyes. Antennae inserted subapically.

*Pronotum* 1.06 times longer than wide, quite strongly constricted towards apex, less so towards base, widest at middle; disc moderately convex, microreticulate and with large dense round punctures, sides quite strongly curved.

Elytra 1.24 times longer than wide and 1.23 times as wide as pronotum, sides moderately curved, maximum width at middle. Striae formed by large deep roundish punctures. Intervals microreticulate, slightly convex and narrower than striae.

Legs. Femora, tibiae and tarsi as described above.

*Ventral side*. Ventral side, except for prosternum, mesoventrite and abdominal ventrites III and IV, with large moderately dense roundish punctures; ventrites I and II with large shallow common impression.

**Variability.** Males are almost identical to the holotype, whereas females have rostrum slightly thinner and slightly more elongate, and metaventrite and first ventrites almost flat.

Male genitalia. Aedeagus as depicted in Fig. 35.

Body length 1.5-1.7 mm.

**Etymology.** The species name, Latin adjective *pusillus* (-*a*, -*um*), meaning tiny, very small, points to the tiny size of the species.

**Collection circumstances.** Sifted from litter under *Ficus vasta* Forssk. (Moraceae) in limestone ravine (J. Hájek pers. comm.).

**Distribution.** Endemic to Socotra Island.

#### Tribe Onycholipini

#### Dipnotyphlus gen. nov.

**Type species.** Dipnotyphlus laminiscapus sp. nov., by present designation.

**Description.** Body small, rather elongate, strongly punctured. Vestiture of sparse setae intermingled with translucent earthy scales at base of rostrum and on legs. Head globose, eyeless. Rostrum rather thick, elongate, dilated at base and in profile tapering towards apex, its level at base higher than that basal one of head. Antennae short, scape very strongly and abruptly widening apicad of middle and with laminar setose expansion situated above insertion of pentamerous funicle; antennomere I of which is only slightly transverse, club large and with numerous erect stiff setae. Pronotum elongate, its base finely marginate. Scutellum invisible. Elytra navicular, very finely carinate at base, shoulders absent. Striae formed by very large deep subrectangularly elongate punctures, intervals narrower than striae. Femora clubbed, edentate, quite compressed, profemora larger than meso- and metafemora. Tibiae short and thick, apical uncus strong. Tarsi slender, tarsomere III not bilobed, claws minute, free. Procoxae almost contiguous and closer to posterior than to anterior margin of prosternum, mesocoxae separated by an interval almost equal to their diameter, metacoxae widely separated by a distance about the same length as the anteriorly truncate metaventrite. Abdominal ventrites I and II elongate, III and IV very short, their combined length about half that of ventrite II, ventrite V rather elongate and crescent-shaped.

**Differential diagnosis.** It is somewhat difficult to place this peculiar new genus into one of the tribes in which Cossoninae are divided at the moment, taking into account also that the boundaries between cossonines and molytines are quite unclear (Howden 1992, Colonnelli 2010, Bellò et al. 2011). *Dipnotyphlus* gen. nov. is considered to belong to the Onycholipini Wollaston, 1873, a cossonine tribe composed of fairly different genera with which the Socotran one shares some of the main characteristics. Among the Cossoninae, the new genus is rather isolated, in addition to being eyeless which is rather uncommon in members of this subfamily, due to the unusual shape of the scape, pentamerous funicle, antennal club with long setae, rostrum dilated at base, navicular elytra with regular rows of punctures, and profemora obviously larger that the remaining ones (Figs 36–38). Similar laminar antennal dilatation is found in some myrmecophilous Nitidulidae (Audisio 1993), e.g. the genus *Amphotis* Erichson, 1843, the function of which is supposedly to protect the insect from a possible attack by ants. Perhaps the expanded scape of *Dipnotyphlus* gen. nov. has the same function.

**Etymology.** The name of the new genus, is composed of the ancient Greek 'δειπνέω' meaning 'to eat' and 'τυφλός' meaning 'blind', and refers to the probable root-feeding behaviour of its single eyeless member. Gender is masculine.

# Dipnotyphlus laminiscapus sp. nov.

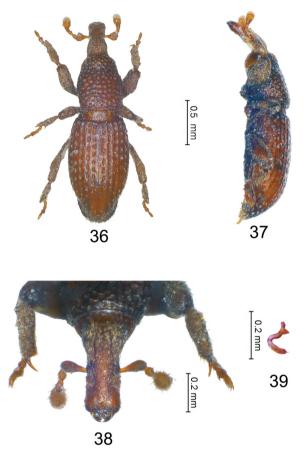
(Figs 36-39)

Type material. Holotype:  $\$  (NMPC), 'Yemen, Socotra island // Al Haghier Mts. // Skant Mt. env. // 12°34.6′N 54°01.5′E, 1450 m // Jiří Hájek leg. 12-13.xi.2010'. Paratypes:  $2\$   $\$   $\$  'Yemen, Socotra // Al Haghier Mts. [sifting] // Skant Mt. env. 1450 m // 12°34.6′N 54°01.5′E // 12-13.xi.2010, P. Hlaváč' (1 NMPC, 1 ECRI);  $1\$   $\$  'Yemen, Socotra Island // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16-18.vi.2012 // 12°34.6′N E 54°01.5′E, 1450 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Female holotype.* Body length 1.9 mm. Ferruginous, moderately shining, antennae and tarsi honey-red. Vestiture of femora, tibiae, at dorsum of rostrum at base, consists of dense, minute, recumbent, translucent golden scales. Erect long golden setae present at base of rostrum and also scattered on pronotal disc; similar shorter recumbent hair-like scales are on each puncture of elytral striae, and few semierect ones are on intervals. Scattered erect golden setae are on femora and tibiae, and few ones may be seen at apex of rostrum and in apical third of its underside. Sparse thin, almost recumbent, golden setae on ventral surface (Figs 36–38).

Head. Rostrum 1.67 times longer than wide at its widest point and 0.63 times as long as pronotum, dilated at base, almost straight and moderately tapering towards apex in lateral view, at base clearly higher than head, dorsum with fine coarse punctures in basal third, then smooth and alutaceous. Scrobes deep, smooth and shining, and almost immediately fused beneath rostrum. Antennae inserted at middle of rostrum. Head separated from rostrum by transverse shallow sulcus.

*Pronotum* 1.33 times longer than wide, faintly constricted at apex, base truncate, apical margin slightly convex, disc rather flat with large quite sparse punctures, sides weakly curved and feebly sinuous towards apex apicad of widest point of pronotum which is just apicad of middle.



Figs 36–39. *Dipnotyphlus laminiscapus* sp. nov., holotype. 36 – habitus; 37 – habitus in side view; 38 – head and front tibiae; 39 – spermatheca.

Elytra navicular, 1.71 times longer than wide, maximum width at middle.

*Ventral side* with large and relatively shallow sparse punctures, metaventrite and abdominal ventrite I with large shallow common depression.

Female genitalia. Spermatheca as depicted in Fig. 39.

**Variability.** Other females, apart from the cuticle colour which is more or less dark, are almost identical to the holotype.

**Etymology.** The Latin name of the new species, a composite noun in apposition, is given after its short scape with a laminar projection over the base of funiculus.

**Collection circumstances.** Sifted from leaf litter in montane evergreen woodland in the highest parts of the Hagher mountains (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

#### Tribe Pentarthrini

### Mesoxenomorphus rugipennis sp. nov.

(Figs 40, 42)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra Island // Bizidig // Avicennia marina mangrove, // 13.vi.2012 // 12°18.6′N, 53°48.2′E, 6 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 13 ♂♂ 28 ♀♀, same label data as holotype (29 NMPC, 2 BMNH, 10 ECRI).

**Additional material examined.** 1  $\circlearrowleft$  in very bad condition and with broken elytra, 'Homaq, 11.x.2007, R. Sindaco leg.' (MCCI).

**Description.** *Male holotype*. Body length 2.7 mm. Cuticle bare, shining, pitchy brown, legs and antennae dark ferruginous. Ventral side somewhat alutaceous, mesoventrite and ventrites I, II and V with not so dense moderately large punctures (Fig. 40).

Head. Rostrum 0.6× as long as pronotum, moderately curved, rather finely punctured, sides slightly concave. Antennae inserted shortly apicad of middle of rostrum; scape thin, slightly curved forward and moderately clubbed; funicular antennomere I slightly longer than wide, thicker than remaining ones which are all from moderately to strongly transverse; club quite small, suboval and about as long as preceding three antennomeres. Head subconical, convex, continuing curve of rostrum; space between eyes same as that of base of rostrum and with elongate pit. Eyes small and barely protruding from head convexity, temples convex and little more than twice eye diameter.

*Pronotum* about as long as wide, with rounded sides up to apical third, then rapidly narrowing towards base, strongly constricted and collar-shaped at apex, apical margin slightly convex, maximum width of pronotum about at basal third; disc moderately convex, with quite sparse and rather fine punctures. Scutellum almost invisible.

*Elytra* 1.80 times longer than wide, disc moderately convex, maximum width at middle; sides subparallel and almost straight up to apical fifth, then jointly rounded towards apex; humeri and preapical calli wanting. Striae catenulate. Interstriae wider than striae, almost flat, with irregular transverse sulci forming somewhat undulate surface.

*Legs* moderately robust; femora quite strongly clubbed and slightly compressed, sparsely setose like short almost straight tibiae; tarsi rather narrow, third tarsomere only slightly wider than preceding one and almost not bilobate, claws simple.

*Ventral side.* Metaventrite and abdominal ventrite I with large common depression in middle, ventrite I slightly longer than II, this about as long as ventrites III+IV, ventrite V crescent-shaped and about as long as ventrite I.

**Variability.** Apart from the colour which is more or less dark, other specimens are very similar to the holotype. Females have rostrum hardly thinner and longer, and lack abdominal depression.

Male genitalia. Aedeagus as depicted in Fig. 42.

Body length 2.3-2.7 mm.

**Differential diagnosis.** This new species is at once distinguished from *M. africanus* Wollaston, 1873 (Fig. 41) and *M. luridus* Hesse, 1928, both from southern Africa, by its elytra with deep and sulciform instead of finely and shallowly punctured striae, and unevenly subrugulose instead of flat smooth intervals. The third species of the genus, the central African *M. pilifer* 

Voss, 1934 is very different from *M. rugipennis* sp. nov. especially by its raised claviform setae and elongate rostrum.

**Etymology.** The sulcate, subrugulose elytra suggested the species name, Latin adjective *rugipennis* (-*is*, -*e*), meaning 'with rugulose wings'.

**Collection circumstances.** Specimens from Bizidig were sifted from decaying leaves in sand under an isolated stand of mangrove *Avicennia marina* (Forssk.) Vierh. (Acanthaceae) (J. Hájek, pers. comm.).

## Subfamily Cryptorhynchinae

#### Tribe Aedemonini

### Mechistocerus inornatus sp. nov.

(Figs 44, 45)

Type material. HOLOTYPE: & (NMPC), 'Yemen, Socotra Island // Dixam plateau // Firmihin (Dracaena forest) // 12°28.6′N, 54°01.1′E, 490 m // Jiří Hájek leg. 15-16.xi.2010°. Paratypes: 6 ♂♂ 10 ♀♀, same label data as holotype (12 NMPC, 4 ECRI); 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' (NMPC); 1 ♂ 3 ♀♀, 'Yemen, Socotra // Dixam plateau Firmihin // (Dracaena forest) 490 m // 12°28.6'N, 54°01.1'E // 15-16.xi.2010 // P. Hlaváč leg.' (3 NMPC, 1 ECRI); 1 ♂, same locality and date with indication 'at light' (NMPC); 10 ♂♂ 34 ♀♀. 'Yemen, Socotra island // Dixam plateau 14-15.vi.2012 // Firmihin, Dracaena woodland // 12°28.6'N, 54°01.1'E, 490 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (38 NMPC, 8 ECRI); 3 ♂♂ 5 ♀♀, 'Yemen, Socotra Island E // Firmihin plato, 400-500 m // N 12°28.46", E 54°00.89" // V. Hula & J. Niedoboyá leg. // 18-19.vi.2010' (6 NMPC, 2 ECRI): 1 3. 'Yemen, Socotra Isl, Firmihin, // GPS 12.474N, 54.915E, 530 m // x.2000 // leg. V. Bejček & K. Šťastný' (NMPC); 8 ♂♂ 18 ♀♀, 'Socotra Is. (YE) Dixam plateau // Firmihin (Dracaena forest) // 12°28.6'N, 54°01.1'E, 490 m // Jan Batelka leg. 15-16.xi.2010' (20 JBPC, 6 ECRI); 5 ♂♂ 14 ♀♀, 'Yemen, Socotra Island // Firmihin, 400-500 m // N 12°28′27″, E 54°0′54″ // 22-25. vi.2009 // L. Purchart & J. Vybíral lgt.' (14 NMPC, 2 BMNH, 3 ECRI); 1 \, \cong , 'Yemen, Socotra Island E // Homhil area, 400-510 m // N 12°34.25", E 54°18′53" // 9-10.ii.2010, at light // L. Purchart & J. Vybíral lgt.' (NMPC); 1 ç, 'Yemen, Socotra Island // Wadi Zirik, 650-670 m // N 12°29'35", E 53°59'28" // 16.vi.2009, L. Purchart lgt.' (NMPC); 6 ♂♂ 5 ♀♀, 'Yemen, Socotra Island // Dixam plateau, Wadi Zerig // pools, Juncus marsh; Dracaena // trees; cave 13-14.vi,2012 // 12°29.6'N, 53°59.5'E, 655 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (8 NMPC, 3 ECRI); 1 2, 'Yemen, Socotra Island // Al Haghier Mts. // wadi Madar, 1180-1230 m // 12°33.2'N, 54°00.4'E // Jiří Hájek leg. 12-14.xi.2010' (NMPC); 1 ♀, 'Yemen, Socotra Isl., Zerik, // 25-27.iii.2001, // leg. V. Bejček & K. Šťastný', (NMPC); 1 ♂ 1 ♀, 'Socotra (YE) // Thar (pitfall trap) // 5.III.2008 - R. Sindaco leg.' (MCCI).

**Description.** *Male holotype*. Body length 13.5 mm. Brown, apex of femora, tarsi and antennal club pitchy-brown, moderately shining. Dorsal vestiture of moderately dense, pale ochreous to brownish, recumbent, roundish to elliptically elongate striate scales, pale ones forming two longitudinal stripes on both sides of pronotal disc and more condensed on sides of elytra although not forming a definite pattern. Scutellum densely covered by pale ochreous scales. Some erect, rather elongate scales are on elytral declivity and near apex. Ventral side clothed with dense, pale, yellowish, recumbent, shortly elliptical scales, which are more elongate on sides of urosternites and hair-like towards middle of them (Fig. 44).

*Head.* Rostrum as long as pronotum, regularly curved, finely and sparsely punctured, faintly carinate on basal fifth, dilated at base and here with some pale erect elongate scales, slightly widening towards apex. Antennae inserted at middle of rostrum; scape thin and moderately

clubbed; funicular antennomere I thicker and shorter than antennomere II, this more than 3 times as long as wide, antennomeres III to VII becoming gradually shorter, antennomere VII not transverse; club fusiform-elongate, setose and about as long as preceding four antennomeres. Head globose, not continuing curve of rostrum; space between eyes narrower than dilated base of rostrum and with elongate pit. Eyes large and not protruding from head convexity, dorsally surrounded by yellowish quite elongate recumbent scales.

*Pronotum* 0.87 times as long as wide, with faintly rounded subparallel sides up to apical third, then rapidly narrowing and slightly sinuate towards apical margin which is rounded, with weak incision in middle, and protruding over vertex of head; base bisinuous; disc feebly convex, with coarse and very dense reticulate punctures, and with hardly visible median smooth bare line. Scutellum rounded, convex.

*Elytra* 1.73 times longer than wide, disc almost flat and with deep scutellar depression, maximum width at apical quarter; sides almost straight and barely diverging from moderately protruding humeri up to apical quarter and then quite strongly jointly curved towards apex; preapical calli moderate but enhanced by impression situated in front and behind them. Striae formed by slightly elongate rectangular quite shallow punctures bearing recumbent scale and separated each other by distance about equal to their diameter. Interstriae slightly wider than striae, almost flat, with fine confuse punctures.

Legs robust; femora quite strongly clubbed and compressed at base, profemora with barely visible tooth, meso- and metafemora toothed, teeth of metafemora strong and acute with extreme apex blunt, moderately and rather uniformly clothed by recumbent ochreous scales and by semierect elongate ones on dorsal margin; tibiae relatively elongate, curved at apex, internal margin sinuous; tarsi relatively stout, clothed by dense hair-like yellowish scales, claws divergent, simple.

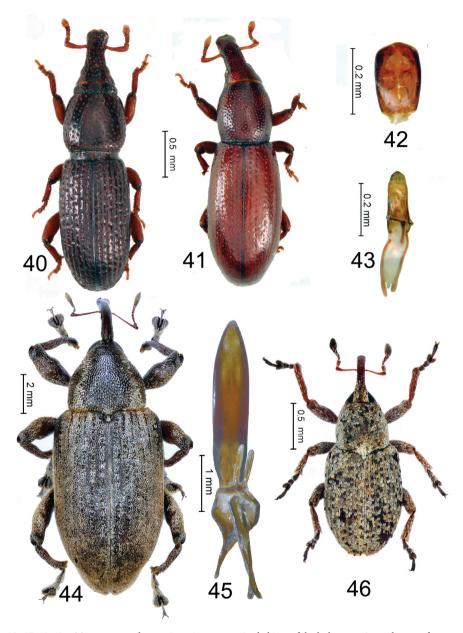
*Ventral side*. Metaventrite depressed and sulcate at middle and with tooth-like tubercle over metacoxae; abdominal ventrites I and II and metaventrite forming large common median depression.

Variability. The species, like several others of its genus, is quite variable, both in size and body shape. Females differ from males by their longer rostrum, up to 1.07 times as long as pronotum, elytra more uniformly convex, parallel sided and more elongate, up to 1.85 times longer than wide, preapical calli weaker, femora less strongly clubbed, abdomen lacking impressions, and metaventral tubercle weak and only slightly protruding over the metacoxae. Depending on the freshness of the specimens, their vestiture may be more or less dense. Also body shape is variable, sides of prothorax being more or less rounded, and sometimes more converging from base to apical third, and elytra of some specimens wider than those of the holotype.

Male genitalia. Aedeagus as depicted in Fig. 45.

Body length 7.4-14.0 mm, being almost all specimens above 10.5 mm.

**Differential diagnosis.** Among some 150 species of *Mechistocerus* Fauvel, 1863 distributed from Australia across the Oriental and Afrotropical Regions, only a few have rather uniform vestiture and large size. The new species can be compared only with *M. breviusculus* Hustache, 1932 from Congo and Togo which is immediately distinguished by its shining bare granules on elytra, and erect scales of the underside (Hustache 1932, Marshall 1958). On the other



Figs 40–47. 40, 42 – *Mesoxenomorphus rugipennis* sp. nov.: 40 – habitus of the holotype; 42 – aedeagus of a paratype in dorsal view. 41 – *Mesoxenomorphus africanus* Wollaston, 1873 from South Africa, Port Elizabeth, habitus. 44–45 – *Mechistocerus inornatus* sp. nov. 44 – habitus of the holotype; 45 – aedeagus of a paratype in dorsal view. 43, 46 – *Sibinia caldaraedicata* sp. nov.: 43 – aedeagus of a paratype in ventral view; 46 – habitus of the holotype.

hand *M. brevicornis* Hustache, 1932 from Zanzibar has carinate and basally sulcate rostrum, second funicular antennomere as long as the first, and anterior half of scutellum devoid of scales (Hustache 1932), and cannot be confused with the new species. *Mechistocerus trapezithorax* Hustache, 1929 from Kilimanjaro has a vaguely spotted vestiture without pronotal stripes, shorter antennae, elytral striae with ocellate punctures separated by a distance much greater than their diameter and tibiae with a blackish ring (Hustache 1929). None of the Madagascan or the other African *Mechistocerus*, or the several species from the Oriental and the Australian Region, can be confused with *M. inornatus* sp. nov.

It is worth pointing out differences between *Mechistocerus* and related taxa, namely *Rhadinomerus* Faust, 1892 (both genera comprise several species very different from each other) are far from unequivocal (Heller 1937) and are based on variable characters, like femora more or less strongly clubbed, kind of vestiture of base of femora, and level of the posterior ending of rostral channel which evidently depends on the length of rostrum. As a proof of this, among the Madagascan species only *Rhadinomerus longulus* (Fairmaire, 1903), which according to Hustache (1924) could be somewhat similar to the Socotran *Mechistocerus*, was included in *Mechistocerus* by Hustache (1924), and then moved into *Rhadinomerus* without comment by the same author (Hustache 1936a). *Rhadinomerus longulus* differs from *M. inornatus*, apart from by the small size (7.0–8.0 mm), by its first funicular antennomere much wider than the following ones, small interocular pit, keeled pronotum, setose pronotal punctures, reddish markings on elytra (Fairmaire 1903, Hustache 1924). *Mechistocerus inornatus* sp. nov. was illustrated by Wranik (2003: plate 178, fig. g) as 'Curculionidae, not yet identified'.

**Etymology.** The species name, the Latin adjective *inornatus* (-a, -um), meaning 'inornate, plain' was chosen in reference to the dorsal vestiture of the new species which is rather uniform compared to that of most of the remaining species of *Mechistocerus*.

**Collection circumstances.** The majority of specimens from Firmihin were attracted to a light trap put in *Dracaena cinnabari* woodland with small trees of *Croton socotranus* Balf. f. and *Jatropha unicostata* Balf. f. (both Euphorbiaceae); several specimens were found at night, crawling on freshly fallen *Dracaena cinnabari* trunks (J. Hájek, pers. comm).

**Distribution.** Endemic to Socotra Island.

#### Subfamily Curculioninae

#### Tribe Derelomini

# Derelomus sp. 1

Material examined (2 spec.). YEMEN: SOCOTRA ISLAND: Wadi Ayhaft, 7.-8.xi.2010, 12°36.5′N 53°58.9′E, 200 m, 2 spec., P. Hlaváč leg. (NMPC).

**Notes.** The taxonomy of *Derelomus* Schoenherr, 1825 is at present very confused, so it is impossible to properly name a species represented by an inadequate number of specimens, considering the extreme variability of almost all known *Derelomus* species. **First record of the genus for Socotra**.

### Derelomus sp. 2

Material examined (3 spec.). YEMEN: SOCOTRA ISLAND: Al Haghier Mts., Scant Mt. env., 12.-13.xii.2010, 1450 m, 12°34.6′N 54°01.5′E, 1 spec., J. Hájek leg. (NMPC); 7 km NW from Rhi di-Hamri, 2.vi.2010, flowering *Croton* shrubs, 1 spec., V. Hula & J. Niedobová leg. (NMPC); Diksam plateau, Bideor, Digeila Cave env., 8.ii.2010, 12°30′31″N, 53°56′18″E, 920 m, 1 spec., L. Purchart & J. Vybíral leg. (NMPC).

**Notes.** This is another perhaps new *Derelomus* species impossible to name. One specimen was found associated with flowers of *Croton* sp., a small Euphorbiaceae tree typical for the island.

#### Tribe Mecinini

#### Rhinusa sp.

Material examined (1 spec.). YEMEN: SOCOTRA ISLAND: Dixam plateau, Firmihin (*Dracaena* forest), 12°28.6′N 54°01.1′E, 490 m, 15.-16.xi.2010, 1  $\stackrel{\frown}{\hookrightarrow}$  J. Bezděk leg. (NMPC).

**Notes.** Probably an undescribed species, but the lack of additional material, especially the male, prevents the placement of this single specimen near to any of the known species, all found in Palaearctic Region (Caldara 2001). **First record of the genus for Socotra.** 

#### Tribe Smicronychini

### Smicronyx (Smicronyx) pauperculus Wollaston, 1864

Material examined (43 spec.). YEMEN: SOCOTRA ISLAND: Lahas, 12.646N 54.091E, 69 m, 17.xi.2000, 1 spec., B. Pražan leg. (NMPC); Homhil, 12°587N 54°302E, 330 m, 20.–21.xi,2000, 1 spec., V. Bejček & K. Šťastný leg. (NMPC); Dixam plateau, wadi Esgego, 12°28′.09″N 54°00′36″E, 300 m, 2.–3.xii.2003, 1 spec., J. Farkač leg. (NMPC); Noged plain, Qareeh (waterfall), 12°20′10″N 53°37′56″E, 57 m, 5.-6.xii.2003, 1 spec., D. Král leg.(NMPC); Hadiboh env., 12°65′02″N 54°02′04″E, ca. 10–100 m, 21.xi.–13.xii.2003, 23 spec., D. Král leg. (20 NMPC, 3 ECRI); same data, 1 spec., J. Farkač leg. (NMPC); Homhil protected area, 12°34'.27"N 54°18'32"E, 364 m, 29.xi.2003, 1 spec., J. Farkač leg. (NMPC); Wadi Hayaft, 12°36′38″N 53°58′49″E, 190 m, 24.–26.xi.2003, 1 spec., P. Kabátek leg. (NMPC); Noged plain, Sharet Halma vill. env. (sand dunes), 12°21.9'N 54°05.3'E, 20 m, 10.-11.xi.2010, 2 spec., J. Bezděk leg. (NMPC); Zemhon area, 12°30′58″N 54°06′39″E, 270-350 m, 3.-4.ii.2010, 3 spec., L. Purchart & J. Vybíral leg. (NMPC); Qualentiah env., slopes 5 Km SE from Quaysoh, 12°39.691'N 53°26.658E, 1 spec., V. Hula & J. Niedobová leg. (NMPC); Thar area, 14.ii.2009, 1 spec., R. Sindaco leg. (MCCI); Wadi Ayev, 250 m, 10.iv.2006, 1 spec., A. Carapezza leg. (ECRI); Hagher Mts., Scand Mt. env., 16.-18.vi.2012, 12°34.6′N 54°01.5′E, 1450 m, montane evergreen woodland, 1 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (NMPC); Hagher Mts., wadi Madar, 18.vi.2012, 12°33.2'N 54°09.4'E, 1170 m, montane shrubland with Cephalocroton socotranus, 1 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (NMPC); Dixam plateau, Tudhen, 18.+22.vi.2012, 12°32.7'N 53°59.9'E, 1135 m, montane shrubland with Commiphora planifrons, 3 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (NMPC).

**Distribution.** Canary Islands (Oromí et al. 2010), Gibraltar (Perez & Bensusan 2012, as *S. rufipennis* Tournier, 1874), Cyprus (Stüben et al. 2012), United Arab Emirates, Northern Africa, Sudan, Cameroon, Congo (Magnano et al. 2009, as *S. kiesenwetteri* Tournier, 1874), Ethiopia (Voss 1963, as *S. kiesenwetteri*?), Kenya (Hustache 1929, as *S. kiesenwetteri*). **First record for Socotra Island.** 

#### Tribe Tychiini

#### Sibinia (Dichotychius) caldaraedicata sp. nov.

(Figs 43, 46)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra Island // Deiqub cave, 12.vi.2012 // cave & *Croton socotranus* + // *Jatropha unicostata* shrubland; // 12°23.1′N, 54°00.9′E, 115 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 4 ♂ 8 ♀♀, same label data as holotype (7 NMPC, 1 BMNH, 3 ECRI); 1 ♀, 'Yemen, Socotra Island // ca. 3 km NE of Shuab // *Avicennia marina* mangrove; // sand dunes, 20-21.vi.2012 // 12°34.1′N, 53°23.9′E, 3 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 2 ♀♀, 'Yemen, Socotra Island // Bizidig, 13.vi.2012 // *Avicennia marina* mangrove; // 12°18.6′N, 53°48.2′E, 6 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (1 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length 1.9 mm. Brown, rostrum, femora and tibiae ferruginous, tarsi and antennal club darker. Dorsal vestiture of serrate, pale ochreous to brownish, recumbent, roundish to elliptically elongate, depressed scales, pale ones forming two vague longitudinal stripes on both sides of pronotal disc and more condensed on basal tip of pronotum, brownish ones scattered on elytra which appear somewhat spotted. Scutellum densely covered by minute milk-white scales. Scales on elytral striae similar to those on intervals which are arranged in 1–2 irregular rows. Ventral side and sides of pronotum and elytra densely clothed with similar but little smaller whitish scales (Fig. 46).

Head. Rostrum slightly shorter than pronotum, regularly curved, finely and sparsely punctured, basal fifth with pale erect elongate scales. Antennae inserted at middle of rostrum; scape thin and quite abruptly clubbed; funicular antennomere I much thicker and about as long as combined length of II and III, antennomere II barely longer than III, antennomeres IV–V shorter, antennomere VII strongly transverse; club shortly fusiform, setose and about as long as preceding three antennomeres. Head globose; space between eyes wider than base of rostrum and clothed with dense, semierect, embricate, elongate ochreous scales. Eyes large and not protruding from head convexity.

*Pronotum* about as long as wide, with faintly rounded subparallel sides up to apical third, then moderately narrowing towards truncate apical margin; base bisinuous; disc rather flat. Scutellum rounded, flat.

*Elytra* 1.36 times longer than wide, disc almost flat, maximum width at apical third; sides almost straight and barely diverging from moderately protruding humeri up to apical third and then quite strongly jointly curved towards apex; preapical calli feeble. Striae formed by slightly elongate rectangular quite shallow punctures completely hidden by scales. Interstriae slightly wider than striae, flat.

Legs thin; femora moderately clubbed, edentate, clothed by moderately dense almost recumbent milk-white scales; tibiae almost straight; tarsi moderately elongate, tarsomere IV a little longer than combined length of two preceding ones; claws simple.

Ventral side. Abdominal ventrites I and II flat, remaining ones quite convex.

Variability. The vestiture, as often occurs in this genus, is quite variable in the colour, size and form of the scales, which can be more elongate than in the holotype and so-

mewhat sulcate, whereas the colour of some specimen is slightly paler or darker than in the holotype. Females differ by their slightly longer and thinner rostrum, and abdomen uniformly convex.

Male genitalia. Aedeagus as depicted in Fig. 43.

Body length 1.9-2.2 mm.

**Differential diagnosis.** General shape and clothing, in addition to simple claws, make this species quite similar only to *Sibinia exigua* Faust, 1885 from western Mediterranean, and more so to *S. subirrorata* Faust, 1885 distributed from southeastern Russia to United Arab Emirates (Caldara 2013). The new species is however easily differentiated from *S. exigua*, although the aedeagus is rather similar to that of this one, by its colour not uniformly milk-white, clearly more elongate body shape and scales much larger and more strictly appressed. From the close *S. subirrorata* the new species is immediately separated by its rostrum not scaled beyond the basal middle, scales concave or sulcate instead of flat, and apex of aedeagus rounded instead of sharp.

It is worthy to note that the other three *Sibinia* Germar, 1817 besides *S. subirrorata* cited by Caldara (1993a, 2013) from the Arabian Peninsula, namely *S. modesta* Desbrochers, 1895, *Sibinia fusca* Tournier, 1874 and *S. reichei* Tournier, 1873, have appendiculate claws and cannot be confused with the new species. The Palaeotropical *Sibinia*, almost all South African (Caldara 1989, 1993b), are included in species groups very different from the subgenus *Dichotychius* Bedel, 1885 to which *S. caldaraedicata* sp. nov. is assigned.

**Etymology.** The species is named after my friend, the outstanding taxonomist Roberto Caldara, who revised the Palaearctic and Ethiopian *Sibinia*, by combining his family name with the Latin word for 'dedicated to' into a composite adjective *caldaraedicatus* (-a, -um). **Distribution.** Endemic to Socotra Island.

#### Tychius (Tychius) seriepilosus Tournier, 1873

Material examined (1 spec.). YEMEN: SOCOTRA ISLAND: Dune Hayft, Noged, 22.ii.2009, 1 ♀, P. Lo Cascio & F. Grita leg. (PLFG).

**Distribution.** A desert weevil distributed across North Africa to Israel, Jordan, Syria and Saudi Arabia (CALDARA 1990, 1993a). **First record from Socotra Island.** 

Subfamily Entiminae Tribe Otiorhynchini

#### Parvorhynchus gen. nov.

**Type species.** Parvorhynchus sordidus sp. nov., by present designation.

**Description.** Size less than 3.0 mm. Head, prothorax and elytra densely clothed by earthy crust and by specialized long, erect, clavate scales arranged as follows: four on head, row of 3–4 scales along edge limiting epifrons, few scattered scales on pronotal disc, row on each elytral interval. Legs and antennae with stiff, erect, partly slightly clubbed setae. Rostrum relatively elongate, slightly widening from base to antennal insertion, then na-

rrowing towards apex. Scrobes entirely visible in dorsal view, in lateral view appearing as bare shiny subtrapezoidal area. Epifrons with sides subparallel and angularly sloping, its dorsum feebly convex and not keeled, its level slightly higher than that of head. Epistome widely subtriangular, smooth, bare on disc and setose on sides, not completely hiding mandibles, and with broad incision at apex. Mentum bisetose. Mandibles quadrisetose. Head elongate, slightly conical, eyeless, dorsum flattened, interocular space with rather deep longitudinal sulcus visible only when crust is removed. Pronotum with dense punctures hidden by crust, anterior margin truncate, posterior one slightly convex, sides moderately rounded, disc flat with feeble anterior depression, its uneven surface visible only when crust is removed. Scutellum invisible. Elytra elliptically elongate, 10-striate, concave at base, disc flat, apical declivity rather abrupt. Legs quite elongate, femora moderately clubbed, edentate, tibiae curved inwards beyond apical third, internal margin somewhat mucronate apically, metatibiae with open corbels, claws free.

Ventral side. Procoxae contiguous and situated at middle of prosternum, mesocoxae narrowly separated by a triangular projection of mesoventrite, metaventrite slightly longer than mesocoxae, metacoxae separated by distance greater that their diameter, abdominal ventrite I with broad shallow depression in middle and longer than combined length of following three ventrites which are subequal in length, ventrite V crescent-shaped, slightly convex and hardly as long as combined length of ventrites III+IV.

**Differential diagnosis.** The taxonomy of the African entimine tribes is currently all but clear (Borovec et al. 2009). With regard to those including genera with blind species, Kuschel (1954) proposed the tribe Typhlorhinini for some African and Madagascan genera with free claws, a tribe which appears poorly defined, the apparent lack of deciduous mandibular cusp being the only reliable character upon which they can be differentiated from the close Otiorhynchini Schoenherr, 1826. Parvorhynchus gen. nov. undoubtedly belongs to the Otiorhynchini as presently understood on account of its free claws, pit-like dorsal scrobes and quadrisetose mandibles. The single small blind member of the new genus is somewhat similar only to the Caucasian species of Otiorhynchus Germar, 1822, subgenus Troglonamertanus Davidyan & Savitsky, 2006, some of which are also eyeless (DAVIDYAN & SAVITSKY 2006), although the *Parvorhynchus* gen. nov. differs immediately by its dense earthy coating completely hiding the cuticle, erect clavate setae on head, rostrum and elytra, epifrons not keeled in the middle and with its sides angular instead of rounded, pronotum not very strongly punctured, base of elytra not S-shaped, intervals not granulate, presence of erect soft setae on internal margin of the male metatibiae. Also some small species of Otiorhynchus subgenus Namertanus Reitter, 1912 lacking femoral teeth are rather similar to the new genus, but they also differ, in addition to the presence of eyes and the much shorter rostrum and pronotum, by the same characters mentioned above, except S-shaped base of elytra (Figs 47, 48, 50). None of the other Otiorhynchini can be confused with Parvorhynchus gen. nov.

**Etymology.** The name of this new genus is a combination of the Latin 'parvus', meaning small, and the Greek 'ρύνχος' meaning beak, in reference to its small size. Gender is masculine.

#### Parvorhynchus sordidus sp. nov.

(Figs 47-49)

Type material. HOLOTYPE: ♂ (NMPC), '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'. PARATYPES: 1 ♀, same label data as holotype (NMPC); 2 ♂♂ (one with abraded crust), 'Yemen, Socotra // Al Haghier Mts. [sifting] // Scant Mt. env., 1450 m // 12°34.6′N, 54°01.5′E // 12-13.xi.2010, J. Bezděk' (1 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length 2.7 mm. Dark red-brown, shining, antennae and legs pale ferruginous. Ventral surface with moderately dense semierect, golden, hair-like scales emerging from earthy coating (Figs 47 and 48).

Head. Rostrum as long as wide, pterygia moderately protruding, setose on sides. Epifrons at narrowest point about 0.75 times as wide as rostrum between antennal insertions. Scrobes quite elongate, smooth and bare, partly sublateral yet entirely visible in dorsal view, in lateral view slightly widening backwards. Antennae rather thin; scape faintly curved and moderately clubbed; funicular antennomere I slightly longer and a little wider than II, antennomere II about twice as long as III, antennomeres III to VII moniliform and only slightly differing each other, not transverse; club fusiform, about as long as three preceding antennomeres.

Prothorax 1.04 times longer than wide, widest just apicad of middle.

*Elytra* elongate, 1.67 times longer than wide, about 1.39 times as wide as pronotum, widest at basal quarter, then sides almost straight and converging up to apical third where they curve towards broadly convex apex. Striae formed by large deep round punctures; intervals somewhat convex and slightly narrower than striae.

*Legs.* Femora sparsely clothed by erect, partly clubbed setae, except internal side; tibiae slightly compressed starting from apical quarter, with slightly bisinuate internal margin, mesotibiae with erect long, curved, whitish, thin, woolly setae on internal margin; tarsi short, tarsomere II transverse, tarsomere III bilobed, all with some stiff erect long setae; claws edentate.

Male genitalia. Aedeagus as depicted in Fig. 49.

**Variability.** Males are almost identical to the holotype. One of them, quite immature, has the crust abraded so the cuticle and its sculpture are clearly visible; its aedeagus is embedded in DMHF, and its apex appears less sharp than that of the holotype. The single female is very similar to the holotype, although its cuticle is slightly paler and the appendages are honey-red; in addition the long setae on internal margin of metatibiae and the ventral impression are lacking.

Body length 2.6–2.7 mm.

**Etymology.** The species name, Latin adjective *sordidus* (-*a*, -*um*), meaning 'dirty', was chosen in reference to the earthy crust covering the cuticle of the new species.

**Distribution.** Endemic to Socotra Island.

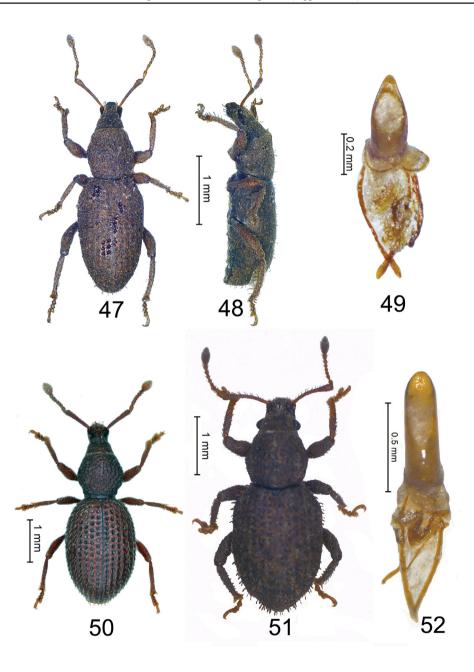
#### Tribe Peritelini

**Taxonomy.** Our present knowledge of African entimines is very poor, and almost all the species occurring south of the Sahara are only quite distantly related with the Palaearctic ones. In addition, a good many of Entiminae tribes are still inadequately defined, and several

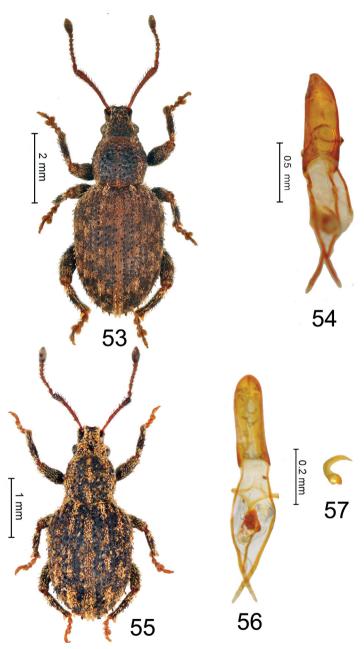
genera are in most cases attributed to one or another tribe just by the absence or the presence of a particular feature, regardless of their true affinities. A revision of the relationships of all those entimines is far beyond the purpose of this paper, therefore are here simply described the new taxa discovered in Socotra in accordance with the tribal arrangement proposed by Alonso-Zarazaga & Lyal (1999), for which the Socotran entimines with scrobes dorsally entirely visible or almost so, trisetose mandibles, fused claws and lacking pronotal vibrissae are to be included in Peritelini in the broad sense as presently understood. A first comprehensive attempt toward a better arrangement of the tropical African Peritelini sensu lato was published by Hustache (1939), and a few years later the genera close to *Systates* Gerstaecker, 1871 were revised and keyed by Marshall (1944). Subsequent contributions were those by the same Marshall (1955), and by Voss (1956, 1962a,b, 1971b), who described some new genera and subgenera most of which poorly characterized and often only based on morphological characters shared by sometimes not so closely related species. For this reason subgenera of large unrevised genera are not used here, as explained in the introduction.

### Identification key to Socotran genera of Peritelini

1	Mentum quadrisetose. Elytra at least with some tubercles, and with the basal two funicular antennomeres differing in length. Vestiture from rather to very dense
2	Vestiture almost entirely concealing integument. Eyes small, protruding. Rostrum about as long as wide. Elytra with several rather large blunt tubercles. Funicular antennomere I slightly longer than second. Male metatibiae not strikingly different from female ones.  **Tuberates gen. nov.**
_	Vestiture not entirely concealing integument. Eyes large, slightly protruding. Rostrum distinctly longer than wide. Elytra at most with some quite sharp tubercles. Funicular antennomere I much longer than second. Male metatibiae strikingly different from female ones.  Systates Gerstaecker, 1871
3	Elytra convex. Vestiture of dense grey and brownish scales, in addition head and pronotum with curved almost recumbent hair-like scales and elytral intervals bearing row of long capitate erect setae. Eyes rather small and convex. Pronotum much narrower than elytra. Size not exceeding 3.8 mm. <i>Ericiates</i> gen. nov.
- 4	Elytra moderately convex or flat. If vestiture is dense, then it is formed of partly metallic scales, or, if greyish, eyes quite large and pronotum not much narrower than elytra 4 Antennae very elongate, funicular antennomere VII about twice as long as wide. Elytra
•	elongate, quite uniformly convex and lacking erect scales
_	Antennae shorter, funicular antennomere VII clearly less than twice as long as wide. Elytra with at least some obvious erect scales
5	Eyes strongly convex, subconical, their maximum convexity clearly basad of middle. Dorsum with thin sulcus. Integument entirely concealed by vestiture. Scape curved, progressively clubbed and with stiff erect setae



Figs 47–52. 47–49 – *Parvorhynchus sordidus* sp. nov., holotype: 47 – habitus; 48 – habitus in side view; 49 – aedeagus in dorsal view. 50 – *Otiorhynchus (Namertanus) argus* Reitter, 1896 from Abkhazia, habitus. 51–52 – *Epactus hirticornis* sp. nov.: 51 – habitus of the holotype; 52 – aedeagus of a paratype in dorsal view.



Figs 53–57. 53–54 – *Epactus hispidus* sp. nov.: 53 – habitus of the holotype; 54 – aedeagus of a paratype in dorsal view. 55–57 – *Epactus auromaculatus* sp. nov.: 55 – habitus of the holotype; 56 – aedeagus of a paratype in dorsal view; 57 – spermatheca of a paratype.

- Epistome separated from epifrons by thin keel. Male antennae and legs with extraordinary features.
   Socotracerus gen. nov.

### Epactus Marshall, 1955

## Epactus hirticornis sp. nov.

(Figs 51-52)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra island // Al Haghier Mts. // Skant Mt. env. 1450 m // 12°34.6′N E 54°01.5′E / J. Bezděk leg. 12-13.xi.2010'. Paratypes: 4 ♂ ♂ 3 ♀ ♀, same label data as holotype (4 NMPC, 3 ECRI); 2 ♂ ♂ 2 ♀ ♀, 'Yemen, Socotra island // Hagher Mts., Skant, // N 12°34.557′ E 54°01.514′ // V. Hula & J. Niedobová leg. // 7-8.vi.2010' (NMPC); 6 ♂ ♂ 3 ♀ ♀, 'Yemen, Socotra island // Al Haghier Mts. // Skant Mt. env. 1450 m // 12°34.6′N E 54°01.5′E // Jiří Hájek leg. 12-13.xi.2010' (6 NMPC, 3 ECRI); 1 ♂, 'Socotra Is. (YE) // Al Haghier Mts. Skant Mt. env. // 12°34.6′N, 54°01.5′E 1450 m // Jan Batelka leg. 12-13.xi.2010' (JBPC); 20 ♂ ♂ 9 ♀ ♀, 'Yemen, Socotra // Al Haghier Mts. [sifting] // Scant Mt. env. 1450 m // 12°34.6′N, 54°01.5′E // 12-13.xi.2010, P. Hlaváč' (17 NMPC, 2 BMNH, 10 ECRI); 1 ♂, 'Yemen, Socotra island / Al Haghier Mts. // wadi Madar, 1180-1230 m // 12°33.2′N E 54°00.4′E // Jiří Hájek leg. 12-14.xi.2010' (NMPC); 1 ♀, 'Socotra Is. (YE) // Dixam plateau // Firmihin (*Dracaena* forest) // 12°28.6′N, 54°01.1′E 490 m // Jan Batelka leg. 15-16.xi.2010' (JBPC); 3 ♂ ♂ 3 ♀ ♀, 'Yemen, Socotra Island // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16-18.vi.2012 // 12°34.6′N E 54°01.5′E, 1450 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (4 NMPC, 2 ECRI).

**Description.** *Male holotype*. Body length 3.5 mm. Piceous, funiculus, tarsi, extreme base and distal half of tibiae pale ferruginous, scape somewhat darker, basal half of tibiae and club brown, apical comb of setae of tibiae golden-yellowish. Vestiture of very dense recumbent partly embricate roundish brownish and coppery to greenish metallic scales. Erect claviform elongate scales are on sides of epifrons, above eyes, on pronotum and are arranged in row on each elytral interval. Ventral surface with not very dense recumbent metallic roundish scales (Fig. 51).

Head. Rostrum 1.20 times wider than long, sides faintly converging from base to slightly protruding pterygia. Epifrons at narrowest point half as wide as maximum width of rostrum, slightly depressed, rather coarsely punctured and scaled at base, its surface between antennae irregularly undulate and bare except for few erect setae, sides gently declining towards sides. Epistome U-shaped and separated from epifrons by thin carina. Scrobes short. Head on sides separated from rostrum by barely visible shallow impression, distance between eyes much greater than that between antennae, space between eyes slightly depressed and with shallow pit, vertex quite flat, temples shorter than greater diameter of eye, sides converging forward. Eyes quite small, subconical with their maximum convexity posteriorly from middle. Antennae thin; scape moderately curved, not very abruptly clubbed and with erect long claviform elongate scales on its anterior margin; funicular antennomeres I and II elongate and about of same length, antennomere I hardly wider than II, antennomeres III to VII only

slightly diminishing in length, all longer than wide; club fusiform oval, about as long as three preceding antennomeres.

*Prothorax* 1.33 times wider than long, widest hardly basad of middle, depressed at basal third and then little convex in lateral view; anterior margin hardly narrower than basal one; sides subangularly rounded; punctures on disc completely hidden by thick vestiture, with barely visible trace of median keel. Scutellum indicated by small depression.

*Elytra* elongate oval, 1.40 times as long as wide, 1.47 times as wide as pronotum, depressed around scutellum, then flat on basal two thirds, apical declivity quite abrupt and almost perpendicular; striae formed by rather sparse rows of roundish to elongate punctures; intervals hardly convex and much wider than striae.

Legs quite short; femora clubbed, edentate; tibiae slightly curved on apical third, mesoand particularly metatibiae granulate on inner margin, apex with stout acute internal mucro; tarsi short, tarsomere I little longer than wide, tarsomere II and widely bilobed tarsomere III transverse, apical tarsomere almost three times as long as tarsomere III.

Ventral side. Metaventrite and abdominal ventrite I flat.

Variability. All specimens are similar to the holotype. Females, besides the abdomen slightly convex and smaller tibial mucros, have plumper elytra and their elytral striae II and III are more or less sinuous from the apical third because interval III is here a little wider that the adjoining ones and with a faint trace of tubercles. The colour of the metallic scales varies a little from golden to greenish-gold. Some specimens have also a thin longitudinal median keel on pronotum.

Male genitalia. Aedeagus as depicted in Fig. 52.

Body length 2.8-4.4 mm.

**Differential diagnosis.** The present species agrees with *Epactus* Marshall, 1955 in all its salient characteristics, namely bisetose mentum, small size, quite short rostrum, subperpendicular epistome, comparatively short second ventrite (MARSHALL 1955). However, all Socotran species of *Epactus* are immediately identified from the Kenyan *E. coenosus* Marshall, 1955 already by their not pedunculate mentum, setose scape, scrobes not extending backwards up to the subconically protruding eyes, interocular distance at least slightly wider than the base of rostrum, somewhat carinate pronotum, elytra with the basal angles not much extending beyond the base of pronotum and protibiae not denticulate but set with more or less stiff setae. On the other hand the second hitherto known species of this genus, E. impar Voss, 1965 from Tanzania, is at once distinguished from the Socotran *Epactus* by its eyes not strongly convex, lack of erect setae on elytra, and posterior tibiae widened at both inner and outer apical margin (Voss 1965). Perhaps future findings of additional continental African species of this genus may prove that the above mentioned characters are worthy of a generic name for the Socotran taxa, but for the time being it seems wise not to propose a new name, considering the present poor knowledge of the African peritelines. See below for separation of E. hirticornis sp. nov. from the close E. hispidus sp. nov.

**Etymology.** The species name, Latin adjective *hirticornis* (-is, -e), meaning 'with hirsute antennae', emphasizes an obvious feature of the new species.

**Collection circumstances.** Sifted from leaf litter in montane evergreen woodland in the highest parts of the Hagher mountains (J. Hájek, pers. comm.).

Distribution. Endemic to Socotra Island.

#### Epactus hispidus sp. nov. (Figs 53-54)

Type material. HOLOTYPE: A (NMPC), 'Yemen, Socotra island // Homhil, protected area // open woodland with Boswellia & // Dracaena trees; 10-11.vi.2012 // 12°34.5'N, 54°18.5'E, 360-500 m', 'Socotra expedition 2012 // J.

Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 2 33 12 99,

same label data as holotype (8 NMPC, 1 BMNH, 4 ECRI).

Description. Male holotype. Body length 4.5 mm. Pitchy-brown, antennae, tarsi, extreme base and distal half of tibiae dark ferruginous, apical comb of setae of tibiae golden-yellowish. Vestiture of moderately dense recumbent comma-like brownish and golden scales; trace of middle and two lateral golden stripes is on pronotum, and elytra show irregular golden patches on upper side. Erect claviform elongate scales are on sides of epifrons, above eyes, on pronotum and are arranged in row on each elytral interval. Under surface with quite sparse almost recumbent metallic seta-like scales (Fig. 53).

Head. Rostrum as long as wide, sides subparallel. Epifrons at narrowest point more than half as wide as maximum width of rostrum, quite flat, parallel side, rather coarsely punctured, scaled and with trace of middle carina, its surface between antennae bare except for few erect setae, sides quite abruptly declining towards sides. Epistome U-shaped and separated from epifrons by thin carina. Scrobes short. Head separated from rostrum by transverse impression, distance between eyes slightly greater than that between antennae, interocular space slightly depressed and with shallow elongate pit continuing on quite flat vertex, temples shorter than greater diameter of eye, sides converging forward. Eyes moderate in size, slightly subconical with their maximum convexity just posterior to middle. Antennae rather thin; scape slightly curved and widening towards apex, with erect long claviform elongate scales longer on its anterior margin; funicular antennomeres I and II elongate and about of same length, antennomere I slightly wider than II, antennomeres III to VII of about same length, not transverse; club fusiform oval, slightly shorter than three preceding antennomeres.

Prothorax 1.06 times wider than long, widest at middle, little convex; anterior margin hardly narrower than basal one; sides moderately rounded; punctures on disc large and deep and partly hidden by vestiture. Scutellum indicated by small depression.

Elytra elongate oval, 1.41 times longer than wide, 1.72 times as wide as pronotum, flat around scutellum, and slightly convex flat on basal two thirds, apical declivity quite abrupt and almost perpendicular; striae formed by rows of subquadrate punctures; intervals slightly convex and little wider than striae.

Legs quite short; femora clubbed, edentate; tibiae slightly curved in apical third, mesoand particularly metatibiae granulate on inner margin, apex with stout acute internal mucro; tarsi short, tarsomere I little longer than wide, tarsomere II and widely bilobed tarsomere III transverse, apical tarsomere twice as long as tarsomere III.

Ventral side. Metaventrite and base of abdominal ventrite I with common weak depression. Variability. Other specimens are similar to the holotype. Females have plumper elytra, smaller tibial mucros and the abdomen slightly convex. Punctures of the upper side can be hidden by an earthy crust and the above mentioned pattern can be more or less evident depending on freshness of the specimen.

Male genitalia. Aedeagus as depicted in Fig. 54.

Body length 4.4-5.3 mm.

**Differential diagnosis.** Very similar to *Epactus hirticornis* sp. nov., from which differs by its subparallel sided rostrum, larger and less convex eyes, elytra of females quite uniformly convex, shorter apex of aedeagus and on average larger size. Much smaller size and different scale pattern make it impossible to confuse this new species with *E. auromaculatus* sp. nov. **Etymology.** The species name, Latin adjective *hispidus* (-*a*, -*um*), meaning bristly, is given in reference to the hirsute appearance of the new species.

Distribution. Endemic to Socotra Island.

#### Epactus sp.

**Material examined** (2 spec.). **YEMEN: SOCOTRA ISLAND:** Qualentiah env., slopes 5 km SE from Quaysoh, 12°39.691′N 53°26.658′E, 4.−5.vi 2010, 1 ♀, V. Hula & J. Niedobová leg. (NMPC); wadi Thar di Itrur, 12°32.8′N 53°42.9′E, 54 m, 21.vi.2012, sifting under *Ficus cordata*, 1 immature ♀, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (NMPC).

**Notes.** These two females are very similar to the females of *E. hirticornis* sp. nov. and *E. hispidus* sp. nov., but are surely specifically different from them by their thicker antennae, uniformly convex eyes and differently shaped pronotum.

### Epactus auromaculatus sp. nov.

(Figs 55-57)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra island // Dixam plateau 14-15.vi.2012 // Firmihin, *Dracaena* woodland // 12°28.6′N, 54°01.1′E, 490 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 5 ♂ 9 ♀♀, same label data as holotype (8 NMPC, 2 BMNH, 4 ECRI).

**Description.** *Male holotype.* Body length 2.8 mm. Piceous, scape except apical fifth, funiculus, tarsi, extreme base and apex of tibiae pale ferruginous, apical comb of setae of tibiae rusty-red. Vestiture of recumbent brownish and golden metallic rather thick comma-like scales giving rise to pattern of Fig. 55. Erect claviform elongate scales are on sides of epifrons, above eyes, on pronotum and are arranged in interrupted row on each elytral interval. Under surface with quite sparse erect comma-like golden scales (Fig. 55).

Head. Rostrum barely wider than long, sides slightly concave from base to hardly protruding pterygia. Epifrons at narrowest point about half as wide as maximum width of rostrum, almost flat, scaled, its surface between antennae alutaceous and bare, sides abruptly declining laterally. Epistome narrowly U-shaped and separated from epifrons by thin carina. Scrobes not very short. Head separated from rostrum by widely V-shaped sulcus, distance between eyes much greater than that between antennae, interocular space slightly depressed and shallowly longitudinally sulcate, vertex quite flat, temples barely shorter than greater diameter of eye, sides converging forward. Eyes quite small, convex with their maximum convexity posterior to middle. Antennae thin; scape moderately curved, slightly clubbed and with erect long claviform elongate scales; funicular antennomeres I and II elongate and about of same length, antennomere I hardly wider than II, antennomere III to VII ones of about same length, not transverse; club fusiform oval, about as long as three preceding antennomeres.

*Pronotum* 1.08 times wider than long, widest at middle, little convex in lateral view; anterior margin about as wide as basal one; sides slightly rounded; strong punctures on disc almost completely hidden by vestiture. Scutellum indicated by barely visible depression.

*Elytra* elongate oval, 1.31 times longer than wide, 1.68 times as wide as pronotum, depressed around scutellum, then quite flat on basal two thirds, apical declivity rather abrupt and almost perpendicular; striae formed by rows of elongate punctures; intervals hardly convex and little wider than striae.

Legs quite short; femora slightly clubbed, edentate; tibiae slightly curved in apical quarter, apex with stout internal mucro; tarsi short, tarsomere I hardly longer than wide, tarsomere II and widely bilobed tarsomere III transverse, apical tarsomere almost three times as long as tarsomere III.

Ventral side. Metaventrite and abdominal ventrite I barely depressed together.

Variability. Variation is low. Females have abdomen flat and slightly plumper elytra.

*Genitalia*. Aedeagus as depicted in Fig. 56. Spermatheca as depicted in Fig. 57. *Body length* 2.7–3.5 mm.

**Differential diagnosis.** This new species is at once separated from the two other Socotran *Epactus* by its small size and peculiar pattern.

**Etymology.** The species name is a composite Latin adjective *auromaculatus* (-*a*, -*um*), meaning 'having golden spots', given in reference to the golden spots of the dorsal surface. **Distribution.** Endemic to Socotra Island.

### Ericiates gen. nov.

**Type species.** *Ericiates cinereus* sp. nov., by present designation.

**Description.** Size not exceeding 3.8 mm. Vestiture of dense roundish scales intermingled on head and pronotum with poorly visible almost recumbent curved hair-like ones, elytral intervals with row of long erect seta-like barely curved slightly capitate scales starting from base. Rostrum relatively short, slightly widening apically, pterygia moderately developed. Epifrons with sides converging forward and abruptly angularly sloping on sides, dorsum fairly convex and with weak carina completely concealed by scaling, at base with deep thin V-shaped transverse sulcus, level of epifrons higher than that of head. Epistome broadly subtriangular, separated from epifrons by smooth depression. Mentum bisetose. Mandibles trisetose. Head short, punctate, scrobes almost entirely visible from above, ptervgia well developed and closed forward, space between eyes with deep sulcus in middle, vertex at extreme base striolate, eyes rather small, slightly elliptical and strongly convex. Pronotum much narrower than elytra, transverse, with sparse deep punctures almost concealed by vestiture, anterior and posterior margins truncate, sides moderately rounded, disc slightly convex with barely noticeable anterior depression. Scutellum invisible. Elytra shortly elliptical, convex, 10-striate, apical declivity continuing outline of elytra. Legs robust, femora moderately clubbed, edentate, tibiae slightly curved inwards at apical third, internal margin somewhat mucronate apically. Anterior coxae contiguous, intermediate ones separate by triangular process shorter that diameter of coxa, posterior ones widely separate by space slightly less than twice length of metaventrite.

**Differential diagnosis.** *Ericiates* gen. nov. is set apart at once from all other African peritelines by the combination of small size, bisetose mentum, rostrum somewhat bulging at base and here to a higher level than that of interocular space, short subglobose 10-striate elytra with straight erect hair-like scales on intervals which start already from their base, dense vestiture of roundish recumbent scales, tibiae with short mucro. The appearance of the new genus is also much that of some Cyphicerini, a tribe including several species occurring in both continental Africa and Arabian Peninsula but hitherto not known from Socotra; *Ericiates* gen. nov. is immediately distinguished from all of them by its fused claws. This and the new periteline genera described below appear endemic to Socotra, and are probably remnants of a quite early settling of this island by their ancestors.

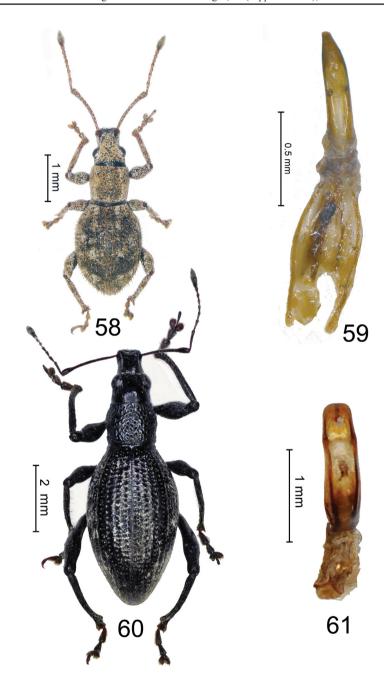
**Etymology.** The name is a combination of the Latin '*ericius*', meaning hedgehog, and *Systates*, a genus of African peritelines, and refers to the setose elytra of the new genus. Gender is masculine.

#### Ericiates cinereus sp. nov.

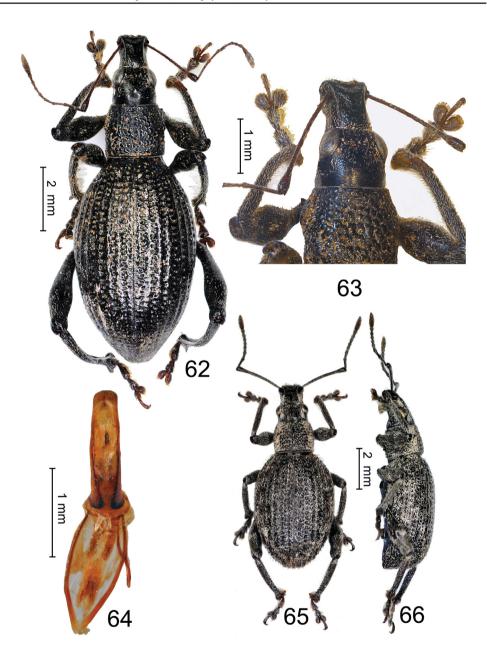
(Figs 58-59)

Type material. HOLOTYPE: & (NMPC), 'Yemen, Socotra // Dixam plateau Firmihin // (Dracaena forest) 490 m // 12°28.6′N, 54°01.1′E // 15-16.xi.2010 // P. Hlaváč leg. '. PARATYPES: 2 ♀♀, same label data as holotype (1 NMPC, 1 ECRI); 2 33, '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' (1 NMPC, 1 ECRI); 1 ♀, 'Socotra Is, (YE) Dixam plateau // Firmihin (Dracaena forest) // 12°28.6′N, 54°01.1′E, 490 m // Jan Batelka leg. 151-16.xi.2010' (JBPC); 1 ♀, 'Yemen, Socotra Isl., Firmihin, // GPS 12.474N, 54.015E, 530 m; // x.2000, // leg. V. Bejček & K. Šťastný' (NMPC); 7 ♂♂ 3 ♀♀, 'Yemen, Socotra Island // Dixam plateau, Wadi Zerig // pools, Juncus marsh; Dracaena // trees; cave 13-14.vi.2012 // 12°29.6′N, 53°59.5′E, 655 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedoboyá & L. Purchart leg. '(5 NMPC, 1 ECRI); 1 ♂ 2 ♀♀, 'Yemen, Socotra Island // Deiqub cave, 12.vi.2012 // cave & Croton socotranus + // Jatropha unicostata shrubland; // 12°23.1'N, 54°00.9'E, 115 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 1 2, 'Yemen, Soqotra Isl., Sirhin area // Dixam plateau, 1-2.xii.2003, N // 12°31′08" E 53°59′09", 812 m // [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 7 ♂♂ 6 ♀♀, 'Yemen, Socotra Island // Diksam plateau, 850-920 m // N 12°31'24", E 53°58'29" // 5.xii,2010 // L. Purchart & J. Vybíral leg.' (9 NMPC, 4 ECRI); 4 ♂♂ 3 ♀♀, 'Yemen, Socotra Isl., // Wadi Zirik, 12.vi.2010, // N 12°29,584', E 053°59,475′ // V. Hula & J. Niedobová leg.' (6 NMPC, 1 ECRI); 1 ♀, 'Yemen, Socotra Island // coastal road, shrubby area // ca 5 km W of Hadibo // 13.vi.2009, L. Purchart lgt. '(NMPC); 1 ♀, 'Yemen, Socotra Island E // Homhil area, 400-510 m // N 12°34′25″, E 54°18′53″ // 9-10.ii.2010 // L. Purchart & J. Vybíral lgt.' (NMPC); 1 \, 'Yemen, Socotra Island // Zemhon area, 270-350 m // N 12°30′58", E 54°06′39" // 3-4.ii.2010, at light // L. Purchart & J. Vybíral lgt.' (NMPC); 1 ♀, 'Yemen, Soqotra Isl., 24-26/xi.2003 // wadi Ayhaft, 190 m // N12°36'38" E53°58'49" // [GPS], David Král lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 ♂, 'Socotra (Yemen) // Tenten // 7.iv.2008 // leg. A. Carapezza' (ECRI); 14 ♂♂ 7 ♀♀, '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 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (16 NMPC, 5 ECRI); 6 ♂♂ 2 ♀♀, 'Yemen, Socotra Island // Dixam plateau, Wadi Zerig // pools, Juncus marsh; Dracaena // trees; cave 13-14.vi.2012 // 12°29.6'N, 53°59.5'E, 655 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (7 NMPC, 1 ECRI); 8 ♂♂ 8 ♀♀, 'Yemen, Socotra Island // Shibhon plateau, // Eserhe, 13.vi.2012 // Croton socotranus shrubland // 12°25.2'N, 53°56.6'E, 547 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (12 NMPC, 4 ECRI).

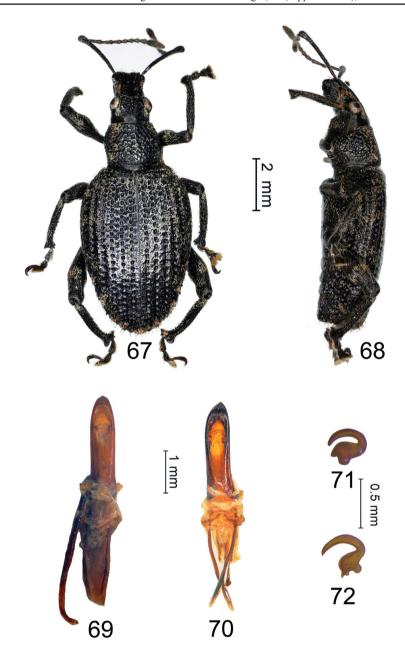
**Description.** *Male holotype*. Body length 3.2 mm. Brown, antennae, apex of femora and tarsi dark ferruginous. Antennae, tibiae and tarsi with suberect curved silvery setae, internal



Figs 58–61. 58–59 – *Ericiates cinereus* sp. nov.: 58 – habitus of the holotype; 59 – aedeagus of a paratype in dorsal view. 60–61 – *Nematocerus barbitibia* sp. nov., holotype. 60 – habitus; 61 – aedeagus in dorsal view.



Figs 62-66. 62-64 – *Nematocerus spinifemur* sp. nov.: 62 – habitus of the holotype; 63 – head, pronotum and front legs of the same to show the spine at the base of femora; 64 – aedeagus of a paratype in dorsal view. 65-66 – *Nesotocerus rectus* sp. nov. 65 – habitus of the holotype; 66 – the same in side view



Figs 67–72. 67–69, 71 – *Nesotocerus complanatus* sp. nov.: 67 – habitus of the holotype; 68 – the same in side view; 69 – aedeagus of a paratype in dorsal view; 71 – spermatheca of a paratype. 70, 72 – *Nesotocerus rectus* sp. nov. 70 – aedeagus of a paratype in dorsal view; 72 – spermatheca of a paratype.

margin of tibiae with some straight semierect stiff dark setae starting from minute granules. Dorsum with ash-grey and brownish scales, latter forming faint middle stripe on pronotum, former giving rise to vague pattern of Fig. 58. Ventral side with not very dense recumbent ash-grey scales and slightly erect setae particularly along middle (Fig. 58).

*Head.* Rostrum 1.30 times wider than long, curved in lateral view, scrobes deep, pit-like and bare, smooth bare line triangularly narrowing connects scrobes with middle of anterior margin of eyes. Epifrons at narrowest point about 0.67 times as wide as rostrum. Antennae thin; scape slightly curved and moderately clubbed; funicular antennomere I 1.50 times longer and hardly wider than II, antennomeres II to VII progressively slightly diminishing in length, all clearly longer than wide; club fusiform elongate, slightly shorter than three preceding antennomeres. Head large, interocular space 1.20 times as wide as rostrum between antennal insertion, vertex strongly transversely rugose, eyes little sunken.

*Pronotum* 1.33 times wider than long, widest about at apical third, with large rather deep not dense punctures.

*Elytra* oval, 1.33 times longer than wide, 1.70 times as wide as pronotum, quite strongly convex both in dorsal and in lateral view.

Legs with setae and scales, latter more dense along middle of femora to form a vague femoral ring.

*Ventral side*. Metaventrite and abdominal ventrite I with large very shallow common depression.

**Variability.** Males are similar to the holotype, whereas elytra of females are much more broadly oval and strongly convex on disc. The vestiture may be more or less pale, and the convexity of eyes is more or less strong. A female paratype, probably collected dead, lacks antennae, protarsi, right middle leg, right metatarsus and left claw segment, although its vestiture is quite intact.

Male genitalia. Aedeagus as depicted in Fig. 59.

Body length 2.8–3.7 mm.

**Etymology.** The name of the new species, Latin adjective *cinereus* (-a, -um), refers to its greyish colour, being the Latin for 'ash-grey'.

**Distribution.** Endemic to Socotra Island.

#### Ericiates sp.

Material examined (1 spec.). YEMEN: SOCOTRA ISLAND: Campsite to Scant, 29.i.2008, 1 ♀, R. Sindaco leg. (MCCI).

**Notes.** This single female with partly missing appendages, the length of which is 3.3 mm, appears to belong to an undescribed species close to the preceding one.

#### Nematocerus Reiche, 1849

### Nematocerus barbitibia sp. nov.

(Figs 60, 61)

**Type material.** HOLOTYPE:  $\lozenge$  (NMPC), 'Yemen, Socotra Isl., Wadi Faar, // GPS 12.433N, 54.195E, 69 m // 1.iv.2001, // leg. V. Bejček & K. Šťastný'. Paratypes:  $1 \lozenge 2 \lozenge \lozenge$ , same label data as holotype (2 NMPC, 1 ECRI);  $1 \lozenge$ , 'Yemen, Socotra Isl. N // Di Lishe beach, 20 m, // 2.ii.2010, // L. Purchart lgt.' (NMPC).

**Description.** *Male holotype.* Body length 7.1 mm. Piceous, shining, antennae and tarsi dark brown, apical comb of setae of tibiae and claws honey-red. Disc of elytra, pronotum and head very sparsely covered by isolate recumbent whitish elongate scales intermingled with almost recumbent whitish to golden hair-like scales. Dorsal clothing appears abraded since on sides and on apical fifth of elytra scales are rather dense, and elongate ones here and there are more condensed in whitish spots or faint stripes. Ventral surface with quite sparse recumbent whitish and golden hair-like scales (Fig. 60).

Head. Rostrum 1.17 times longer than wide, sides slightly converging from base to moderately protruding pterygia. Epifrons slightly convex, thinly and sparsely punctured at base and subrugose towards crescent weak sulcus situated between scrobes, at narrowest point about 0.75 times as wide as rostrum between antennal insertion, with barely visible trace of dorsal carina and with sides weakly keeled. Epistome U-shaped and distinct from epifrons by its smooth surface. Scrobes short, entirely visible in dorsal view, in lateral view low straight carina starts just basad of scrobe and almost reaches middle of eye. Head separated from rostrum by transverse concave sulcus, distance between eyes about same as that between antennal insertion, space between eyes faintly depressed and longitudinally sulcate, vertex convex, basally finely strigose and apically punctured, temples just little shorter than greater diameter of eye and subparallel sided. Eyes large, elliptical and convex. Antennae thin; scape almost straight and moderately clubbed; funicular antennomere I 1.80 times longer and hardly wider than II, antennomeres II to VII progressively diminishing in length, all longer than wide; club fusiform elongate, about as long as three preceding antennomeres.

*Pronotum* 1.28 times wider than long, widest just apicad of middle, quite flat dorsally in lateral view; anterior margin hardly narrower than flanged basal one; sides weakly rounded; disc with large, irregularly polygonal smooth flattened granules becoming smaller and sparser on sides and separated by coarsely punctured intervals. Scutellum broadly triangular, barely visible.

*Elytra* elongate-oval, 1.82 times longer than wide, about 1.78 times as wide as pronotum, moderately convex on basal half, apical declivity almost perpendicular; striae formed by rather uneven rows of irregularly subquadrate large punctures; intervals not wider than striae, quite smooth and little convex.

Legs elongate; femora clubbed, edentate, sparsely clothed by recumbent and slightly erect whitish setae, extreme base of profemora with barely visible very obtuse minute protuberance; protibiae quite strongly curved on apical half, mesotibiae moderately so, metatibiae with their apical half curved and somewhat twisted on side facing elytra so that their section is triangular there, and with rather obtuse tooth placed on internal side just basad of level where ends apical comb on external side, pro- and mesotibiae with erect long whitish thin setae on internal margin, those on metatibiae are on whole surface excepted internal flattened area facing elytra which is smooth and bare; tarsi robust with erect thin setae and stiff semirerect longer ones, tarsomere I longer and slightly wider than II which is longer than wide, tarsomere III bilobed and as long as wide, tarsomere IV projecting from third by about length of III, claws fused in basal half.

*Ventral side*. Metaventrite, abdominal ventrite I and base of ventrite II with large rather deep common impression, rest of ventrites convex in middle. Anterior and median right claws, and posterior claw segment missing.

Male genitalia. Aedeagus as depicted in Fig. 61.

Variability. The other male is almost identical to the holotype, its right antenna, right median claws and half of left claw segment missing. Elytra of females are broadly oval and strongly convex on disc, their profemora lacking basal protuberance, the long erect setae of tibiae are missing, and their metafemora have no trace of apical incision. One of the females is slightly immature so that its left elytron is depressed at apical third, the antennae of the same specimen are broken, the left beyond funicular antennomere III, the right having only the base of scape. The other female lacks both antennal funicles. The rostrum of all paratypes is more evidently longitudinally keeled, on dorsum of elytra are more visible some whitish spots and some vague pearly-white lines on sides of elytral declivity.

Body length 5.6-7.5 mm.

**Differential diagnosis.** Nematocerus barbitibia sp. nov. and the other Socotran species, N. spinifemur sp. nov., are similar to the Somalian species Nematocerus globosus (Gestro, 1892), comb. nov., and N. humerosus (Gestro, 1892), comb. nov., both moved from Systates Gerstaecker, 1861 to Nematocerus Reiche, 1849 on account of their quite accurate descriptions by Gestro (1871). Nematocerus barbitibia sp. nov. is close to N. globosus, described upon a single female from Eyl (Nugal province, Somalia), differing from it by the anterior margin of pronotum not clearly narrower than posterior one, dorsal carina of rostrum, if present, not anteriorly bifurcate, and lack of evident lateral white stripes on thorax and elytra, although the fairly poor condition of the types of N. barbitibia sp. nov. does not allow to be sure that this feature is truly constant. Nematocerus humerosus, described from Uebi (probably Uebi Shebeli, central Somalia) also based on a single female, differs immediately from the new species by its longitudinally strigose rostrum and transversely rugulose interocular space, trapezoid pronotum and dense grevish clothing of scales. The new species is also not unlike N. angustirostris (Aurivillius, 1926) from Eritrea and Somalia, but, apart from the different pattern and the much finer pronotal granules, male tibiae of this species do not show long setae or apical notch on their inner margin. See below for differences from the following species. Etymology. The species name, a composite Latin noun barbitibia (meaning 'bearded tibia') in apposition, was chosen in reference to its setose male tibiae.

**Distribution.** Endemic to Socotra Island.

## Nematocerus spinifemur sp. nov.

(Figs 62-64)

Type material. Holotype:  $\lozenge$  (IRSB), 'Coll. I.R.Sc.N.B // Sokotra isld. // Ayft valley/22-XI-2008 // Leg. Saldaitis/I.G.31.268 // Achat A. Saldaitis'. Paratypes:  $4 \lozenge \lozenge 3 \lozenge 9$ , same label data as holotype (4 IRSB, 2 ECRI);  $1 \lozenge 9$ , 'Yemen, Socotra Isl. NW // Di Hamri, 20 m // N 12°37′59″, E 54°15′40″ // 2.ii.2010, L. Purchart lgt.' (NMPC);  $1 \lozenge 9$ , 'Yemen, Socotra Isl. E // Kesa env., 220-300 m // N 12°39′37″, E 53°26′42″ // 28-29.i.2010, L. Purchart lgt.' (NMPC);  $1 \lozenge 9$ , 'Yemen; Soqotra Is., 23.xi.2003 // Gubbah vill. env. // N 12°36′35″N, E 53°46′56″ // 7 m [GPS]; Jan Farkač leg.', 'Yemen - Soqotra // 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC).

**Description.** *Male holotype*. Body length 8.1 mm. Piceous, shining, antennae and tarsi dark brown, apical comb of setae of tibiae and claws dark brown (Figs 62–63).

Head. Rostrum 1.23 times longer than wide.

Pronotum 1.19 times wider than long.

Elytra elongate-oval, 1.72 times longer than wide, about twice as wide as pronotum.

Legs. Femora sparsely clothed by recumbent whitish setae, basal half of profemora with semierect long white setae, extreme base of profemora with acute small tooth, apical half of mesofemora with long setae; tibiae similar to those of preceding species, subapical tooth of metatibiae stronger and more acute, erect long whitish thin setae on internal margin of mesotibiae very long and soft, those on metatibiae also very long, like are hair-like setae and stiff semirerect setae of tarsi. Posterior right claw segment missing.

Variability. Males are smaller but almost identical to the holotype, the basal tooth on profemora of one of them is a little smaller than that of the holotype. Elytra of females are broadly oval and strongly convex on disc, and their legs do not have apical incision. All the specimens are somewhat abraded, but some females have more evident trace of vestiture formed on pronotum by recumbent pearly-white oval elongate and of golden comma-like scales more condensed on sides of head and pronotum, whereas on elytra these scales are moderately dense and give rise to a somewhat spotted golden and whitish faint pattern, particularly visible on elytral declivity and on sides.

Male genitalia. Aedeagus as depicted in Fig. 64.

Body length 6.6-8.8 mm.

**Differential diagnosis.** This species is so similar to *N. barbitibia* sp. nov. that it appears better just to note their small differences. Apart from their on average larger size, males of *N. spinifemur* sp. nov. differ from those of *N. barbitibia* sp. nov. by their small rather acute spine at base of femora (obsolete in *N. barbitibia* sp. nov.), erect setae of pro- and mesofemora, much stronger incision of apical quarter of internal margin of metatibiae, longer setae of all tibiae, and brown instead of ferruginous apical comb of setae of metatibiae. This character is the only one by which the females of both the above new species can be surely recognised.

**Etymology.** The species name, the composite Latin noun *spinifemur* (meaning 'with spiny femur') in apposition, is given in reference to the spine at base of the male profemora.

**Distribution.** Endemic to Socotra Island.

#### Nesotocerus gen. nov.

Type species. Nesotocerus rectus sp. nov., by present designation.

**Description.** Medium size from 5.3 up to 8.9 mm. Vestiture of sparse to rather dense roundish and elongate scales intermingled with almost recumbent to erect little curved hair-like to narrowly capitate scales, latter semierect to erect at base of elytral intervals V to VII and on all intervals on elytral declivity. Rostrum not or hardly wider than long, slightly widening apically, pterygia moderately developed. Epifrons at level with interocular space, sides slightly converging forward and angularly sloping on sides, dorsum flat to barely convex and with at least trace of longitudinal middle carina, at base with shallow widely V-shaped transverse sulcus at least visible on sides. Epistome separated from epifrons by low thin carina. Mentum bisetose, not pedunculate. Head short, scrobes moderately large, pit-like and entirely visible from above, space between eyes sulcate in middle, vertex striolate at base, strigosities rather distant from eyes. Eyes quite large, slightly elliptical and moderately convex. Pronotum narrower than elytra, transverse, with flattened usually large granules and median sulcus or low

flat carina, anterior and posterior margins truncate, sides moderately rounded, disc slightly convex with barely noticeable anterior depression. Scutellum invisible. Elytra elliptical, flat on disc at least in males, 10-striate, base not carinate, apical declivity almost perpendicular or slightly obtuse at apex. Legs quite robust, femora clubbed, edentate, tibiae slightly curved inwards at apical third, internal margin with stout mucro at inner apical angle. Anterior coxae contiguous, intermediate ones separate by triangular process narrower that diameter of coxa, posterior ones widely separated by space slightly less than twice length of metaventrite. Metatibial corbels open.

**Differential diagnosis.** Depressed elytra, presence of some specialized erect setae at base of lateral intervals and erect hair-like scales only on apical third of elytra make this new genus easy to separate from all the hitherto described African Peritelini. *Nesotocerus* gen. nov., due to its bisetose mentum, somewhat carinate rostrum, weak sulcus separating head from rostrum, striolate occipital area not reaching eyes, elytra not basally carinate and with ten striae, appears somewhat related only with *Nematocerus* Reiche, 1849, a quite large genus including species distributed in Eritrea, Ethiopia, Somalia, Socotra (see above), Kenya, Tanzania and Democratic Republic of Congo, differing immediately from it, inter alia, by depressed elytra at least in males, erect setae at base of intervals 5 and 6, erect hair-like scales on elytral declivity and short mucro at inner margin of tibial apex. *Nesotocerus* gen. nov. appears very close to *Socotracerus* gen. nov., see below the differential diagnosis of the latter genus.

**Etymology.** The name of the new genus alludes to its affinity with *Nematocerus* and to its insular distribution, from the Greek 'νήσος', meaning island. Gender masculine.

# Nesotocerus rectus sp. nov.

(Figs 65, 66, 70, 72)

Type material. HOLOTYPE: 3 (NMPC), 'Yemen, Socotra Isl., Noged, // GPS 12.318N, 53.678E, 250 m; // 12-12. xi.2000, // V. Bejček & K. Šťastný'. Paratypes: 4 334 99, same label data as holotype (6 NMPC, 2 ECRI); 1 Systates 319, 'Yemen, Socotra Isl., // Noged, Mokhar, // 31.iii.2001, // leg. V. Bejček & K. Šťastný' (NMPC); 319, 'Yemen, Soqotra Isl., 2003 // 5-6/xii, Noged plain// Qaareh (waterfall), 57 m // N12°27′10″, E53°37′56″ // [GPS], David Král Igt.' (NMPC).

**Description.** *Male holotype*. Body length 7.9 mm. Piceous, shining, apical tarsomere dark brown, apical comb of setae of tibiae dark ferruginous, mucro of metatibiae honey-red. Dorsal surface of rostrum, head, pronotum and elytra sparsely covered by recumbent light grey to pale yellowish elongate scales intermingled with some comma-like scales. Sides of rostrum and of prothorax with dense partly embricate and slightly erect larger nacreous scales forming kind of lateral pale stripe. At beginning of elytral declivity there is faint U-shaped pale band, and on elytral intervals row of elongate clavate scales which are recumbent, dark and barely visible on disc, whereas on lateral intervals and on apical third they become whitish, erect, long and seta-like. Some long curved erect setae are at base of intervals VI and specially VII. Ventral surface with rather sparse somewhat erect whitish hair-like scales (Figs 65–66).

Head. Rostrum 0.97 times as long as wide, sides moderately converging from base to

apical two thirds of rostral length, then fairly widening towards apex; pterygia not very prominent. Epifrons slightly convex, subtly and sparsely punctured, at base with low carina ending at level of its narrowest point which is 0.59 times as wide as rostrum, sides weakly keeled. Epistome V-shaped and separated from epifrons by shallow depression. Scrobes short, entirely visible in dorsal view. Head separated from rostrum by rather shallow V-shaped sulcus, interocular distance about same as that between antennal insertion, space between eyes faintly depressed and with a longitudinal sulcus ending on vertex far beyond eyes, vertex weakly convex, basally finely strigose and apically sparsely punctured, temples about 1.5 times shorter than greater diameter of an eye and subparallel sided. Eyes large, somewhat elliptical and moderately convex. Antennae thin; scape almost straight and moderately clubbed; funicular antennomere I 1.80 times longer and barely wider than II, antennomeres II to VII progressively diminishing in length, all distinctly longer than wide; club fusiform elongate, about as long as three preceding antennomeres.

*Pronotum* 1.28 times wider than long, widest about at middle, quite flat dorsally in lateral view; anterior margin hardly narrower than somewhat flanged basal one; sides quite rounded; disc with large irregularly round smooth flattened granules becoming little smaller on sides and with faint median low carina on apical half. Scutellum broadly triangular, barely visible.

*Elytra* elongate-oval, 1.45 times longer than wide, about twice as wide as pronotum, disc almost flat, apical declivity abrupt and almost perpendicular; striae formed by rather regular rows of irregularly subquadrate large punctures; intervals not wider than striae, surface quite uneven and little convex.

Legs rather short; femora clubbed, edentate, sparsely clothed by recumbent hair-like scales and by slightly erect whitish setae at base; tibiae fairly curved on apical half, and here with their inner margin bearing some erect setae, internal margin of metatibiae granulate, with acute long apical mucro surmounted by tuft of compact golden setae basad of which there are some not dense very long curved silver setae in addition to shorter ones which are also to be found on pro- and mesotibiae; tarsi robust with stiff semirerect long setae, tarsomere I longer than II which is about as long as wide, tarsomere III bilobed and slightly transverse, tarsomere IV projecting from third 1.25 times length of III, claws fused in basal half.

*Ventral side.* Prosternum with tubercle immediately basad of coxae; metaventrite and abdominal ventrite I with large shallow common depression.

**Variability.** Other males, apart from the vestiture more or less abraded, are very similar to the holotype. Elytra of females are more oval and more convex on disc, their abdomen is flat, the metatibiae lacking long setae basad of the golden tuft and their mucro on inner apical margin is shorter than that of males.

*Male genitalia.* Aedeagus as depicted in Fig. 70. Spermatheca as depicted in Fig. 72. *Body length* 6.7–8.9 mm.

Differential diagnosis. See the key below to separate this species from its relatives.

**Etymology.** The species name, Latin adjective *rectus* (-*a*, -*um*), meaning 'straight', was chosen in reference to the abrupt elytral declivity of the new species.

**Distribution.** Endemic to Socotra Island.

#### Nesotocerus complanatus sp. nov.

(Figs 67, 68, 69, 71)

Type material. HOLOTYPE: & (NMPC), 'Yemen, Sogotra Is. // 24-26/xi.2003 // wadi Ayhaft, 150 m // N12°36'38", E53°58′49" // [GPS], David Král lgt.'. PARATYPES: 3 ♀♀, same label data as holotype (2 NMPC, 1 ECRI); 2 ♂♂, 'Yemen, Soqotra Is., wadi // Ayhaft, 24-26/xi.2003, N 12° // 36'38", E 53°58'49", 190 m // [GPS], leg. P. Kabátek', 'Yemen - Sogotra // 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (1 NMPC, 1 ECRI); 1 &, 'Yemen, Sogotra Is., wadi // Ayhaft, 24-26.xi.2003, N 12°// 36'38", E 53°58'49", 190 m // [GPS], leg. P. Kabátek' (NMPC); 1 Ç, 'Yemen, Soqotra Is., Qariaah // vill. env., 28.xi.2003, N 12°38′// 05″ E 54°12′39″, 11 m[GPS] // leg. P. Kabátek' (NMPC); 1 3, 'Yemen, Soqotra Is., wadi // Deneghen, 27.xi,2003, N 12° // 36'55", E 54°03'49", 85 m // [GPS], leg. P. Kabátek', 'Yemen - Soqotra // 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 2, 'Yemen, Socotra Island E // Kesa env., 220-300 m // N 12°39'37", E 53°26'42" // 28-29.i.2010, L. Purchart lgt.' (NMPC); 1 ♂1 ♀, 'Coll. I.R.Sc.N.B. // Sokotra Isld. // Ayft valley/22-XI-2008 // Leg. Saldaitis/I.G. 31.268 // Achat A. Saldaitis' (1 IRSB, 1 ECRI); 1  $\stackrel{\wedge}{\cap}$  1  $\stackrel{\circ}{\circ}$ , 'Coll. I.R.Sc.N.B. // C Sokotra Isld., // Top of Diksam valley // 22-III-2009 // Leg. Saldaitis/I.G. 31.268 // Achat A. Saldaitis' (IRSB); 1 3, 'Socotra: W. Ayheft // 28.II.-1.III.2009 - leg. P. // Lo Cascio & F. Grita' (PLFG); 1 ♀, 'Socotra (YE) // Wadi Ayahft, 28.X.2007, R. Sindaco leg.' (MCCI); 1♀, 'Yemen, Socotra Island E // Kesa env. 220-300 m // N 12°39'37", E 53°26'49" // 28-29.i.2010, L. Purchart lgt.' (NMPC); 2 ♀♀, 'Yemen, Socotra Isl., 2.vi.2010, // 7 Km NW from Rhi di-Hamri, // flowering Croton shrubs, // V. Hula & J. Niedobová leg.' (1 NMPC, 1 ECRI); 1 ♂♂6 ♀♀. 'Yemen, Socotra Island // road between Airport and Hadiboh // 12°38′27″N 54°58′22″E, // 80 m, 2.vi.2012 // V. Hula & J. Niedobová leg.' (5 NMPC, 2 ECRI); 3 ♂♂ 2 ♀♀, 'Yemen, Socotra Island // Hoq cave env. // 12°35′10″N 54°21′31″E, // 215 m, 1.vi.2012 // V. Hula & J. Niedobová leg. '(4 NMPC, 1 ECRI); 6 ♂♂6 ♀♀, 'Yemen, Socotra Island // wadi Dineghen // 12°36′58″N 54°03′48″E, // 90 m, 6.vi.2012 // V. Hula & J. Niedobová leg. (7 NMPC, 2 BMNH, 3 ECRI); 1 ♂ 1 ♀, 'Yemen, Socotra Island // Kaza Kazihon vill. env. // 12°31′13″N 53°55′36″E, // 900 m, 5.vi.2012 // V. Hula & J. Niedobová leg. (NMPC); 2 👌 1 2, 'Yemen, Socotra Island // Sheq vill. env., 8.vi.2012 // Croton socotranus + Jatropha // unicostata shrubland; // 12°39.7′N, 54°03.8′E, 15 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype*. Body length 7.7 mm. Piceous, rather shining, apical tarsomere dark brown, apical comb of setae of tibiae dark brown, mucro of metatibiae ferruginous. Dorsal and ventral surface with vestiture about same as that of preceding species (Figs 67–68).

*Head.* Rostrum about as long as wide and similar to that of *N. rectus* sp. nov. Epifrons slightly concave, rather densely punctured, at base with low carina ending at level of its narrowest point which is 0.57 times as wide as rostrum, sides with weak keel. Epistome V-shaped and separated from epifrons by shallow depression. Head and antennae similar to those of preceding species.

*Pronotum* 1.33 times wider than long, widest at about middle, quite flat dorsally in lateral view; anterior margin not narrower than somewhat flanged basal one; sides moderately rounded; disc with large irregularly polygonal smooth flattened granules becoming little smaller on sides and with just barely visible trace of median low carina on apical half. Scutellum poorly visible.

*Elytra* elongate oval, 1.52 times longer than wide and 1.97 times as wide as pronotum, disc faintly depressed, apical declivity abruptly overhanging and forming with elytral disc subacute angle.

*Legs* as in preceding species, only mucro of mesotibiae less acute, so that tuft of compact golden setae greatly exceeds tooth.

*Ventral side*. Prosternum with tubercle immediately basad of coxae; metaventrite and abdominal ventrite I with large shallow common depression.

Variability. Apart from the vestiture more or less abraded, other males are very similar to the

holotype, being the elytral shape of some of them less ovate. Elytra of females are broadly oval and a little more convex on disc, the mucro on inner apical margin of metatibiae is shorter, they are lacking long setae basad of the golden tuft, and their abdomen is flat. Some of the paratypes have more evident apical carina on pronotal disc.

*Genitalia*. Aedeagus as depicted in Fig. 69. Spermatheca as depicted in Fig. 71. *Body length* 6.9–8.7 mm.

**Differential diagnosis.** This species is close to *N. rectus* sp. nov. and can be differentiated from it by its much more depressed elytra both in males and females, more irregular and somewhat subpolygonal pronotal granules, darker apical comb of setae, shorter mucro of posterior tibia, narrower aedeagus, different spermatheca (Figs 65–71). Particularly fresh examples are rather similar also to *N. labeculatus* sp. nov. from which *N. complanatus* sp. nov. can be distinguished by its apical setae longer than one elytral interval.

**Etymology.** The species name, Latin adjective *complanatus* (-a, -um) meaning 'levelled, razed', refers to the flattened elytra of the new species.

**Distribution.** Endemic to Socotra Island.

#### Nesotocerus labeculatus sp. nov.

(Figs 73-75)

Type material. Holotype: & (NMPC), 'Yemen, Socotra // Dixam plateau Firmihin // (Dracaena forest), 490 m // 12°28.6′N, 54°01.1′E // 15-16.xi.2010 // P. Hlaváč leg.'. PARATYPES: 9 ♂♂ 4 ♀♀, same label data as holotype (9 NMPC, 2 BMNH, 2 ECRI); 2 ♂♂ 4 ♀♀, 'Socotra Is. (YE) Dixam plateau // Firmihin (*Dracaena* forest), 490 m // 12°28.6′N, 54°01.1′E, // 15-16.xi.2010 Jan Batelka leg. (5 JBCP, 1 ECRI); 1 3, 'Yemen, Socotra Island // Firmihin, 400-500 m // N 12°28′27″, E 54°0′54″ // 22-25.vi.2009 // J. Purchart & J. Vybíral lgt.' (NMPC); 3 ♂♂2♀♀, 'Yemen, Socotra Isl., // Dgisfu valley, 2.vi.2010 // N 12°28,444', E 054°08,596' // V. Hula & J. Niedobová leg.' (4 NMPC, 1 ECRI); 1 3, 'Yemen, Socotra Island // Zemhon area, 270-350m // N 12°30′58", E 54°06′39" // 3-4.ii.2010 // L. Purchart & J. Vybíral lgt.' (NMPC); 2 ♀♀, 'Yemen, Socotra Island // Diksam plateau, 850-920 m // N 12°31′24″, E 53°58′29″ // 5.ii.2010 // L. Purchart & J. Vybíral lgt.' (1 NMPC, 1 ECRI); 9 ♂♂ 7 ♀♀, 'Yemen, Socotra // Aloove area, Hassan vill. // env. 221 m // 12°31.2′N, 54°07.4′E 9- // 10.xi.2010 P. Hlaváč' (10 NMPC, 6 ECRI); 2 ♂♂ 1 ♀♀, 'Yemen, Socotra Island // Aloove area, Hassan vill. env. // 12°31.2'N, 54°07.4'E, 221 m // Jiří Hájek leg. 9-10.xi.2010' (2 NMPC, 1 ECRI); 8 ♂♂ 9 ♀♀, 'Socotra Is. (YE) // Aloove area, Hassan vill. env. // 12°31.2′N, 54°07.4′E, 221 m // Jan Batelka leg. 9-10.xi.2010' (14 JBCP, 3 ECRI); 7 🖒 🖒 13 🗣 🕻 , '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 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (16 NMPC, 5 ECRI); 1 %, 'Socotra (Yemen) // Wadi Ayhev 250 m // 10.iv.2008 // leg. A. Carapezza' (15 NMPC, 5 ECRI); 1 ♀, 'Yemen, Socotra island // Homhil, protected area // open woodland with Boswellia & // Dracaena trees; 10-11.vi.2012 // 12°34.5'N, 54°18.5'E, 360-500 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 1 ♀, 'Yemen, Socotra Island // Deiqub cave, 12.vi.2012 // cave & Croton socotranus + // Jatropha unicostata shrubland; // 12°23.1'N, 54°00.9'E, 115 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype*. Body length 5.6 mm. Piceous, rather shining, tibiae in pars, tarsi and apical five antennomeres of funiculus brown, claws ferruginous. Dorsal surface of rostrum, head and pronotum sparsely covered by recumbent light grey to dirty yellowish elongate scales. Sides of rostrum, upper and under margins of eyes and sides of prothorax with dense partly embricate triangular to elongate golden-yellowish scales forming kind of lateral pale stripe. Elytra with moderately dense recumbent elongate mottled brownish and

yellowish-golden elongate scales; at beginning of elytral declivity there is broadly V-shaped pale band formed by some irregular spots larger of which are on intervals III and V, besides row of clavate elongate scales recumbent on disc and erect on lateral intervals. Some long curved erect setae are at base of intervals VI and specially VII. Ventral surface with rather sparse somewhat erect whitish hair-like scales less dense in middle (Fig. 73).

Head. Rostrum about as long as wide, sides feebly converging from base to apical two thirds of rostral length, then fairly widening towards apex; pterygia moderately prominent. Epifrons scarcely depressed, moderately densely punctured, with barely visible basal carina ending little apicad of level of its narrowest point which is 0.49 times as wide as rostrum, sides keeled. Epistome U-shaped and separated from epifrons by rather deep V-shaped sulcus. Scrobes short, entirely visible in dorsal view. Head separated from rostrum by shallow sulcus only visible at sides, interocular distance about same as that between antennal insertion, space between eyes faintly depressed and with longitudinal sulcus ending between eyes, vertex almost flat, basally finely strigose and apically sparsely punctured, temples about two times shorter than greater diameter of eye and subparallel sided. Eyes large, somewhat elliptical and moderately convex. Antennae rather thin; scape almost straight and moderately clubbed; funicular antennomere I twice as long and barely wider than II, antennomeres II to VII progressively diminishing in length, all distinctly longer than wide; club fusiform elongate, about as long as three preceding antennomeres.

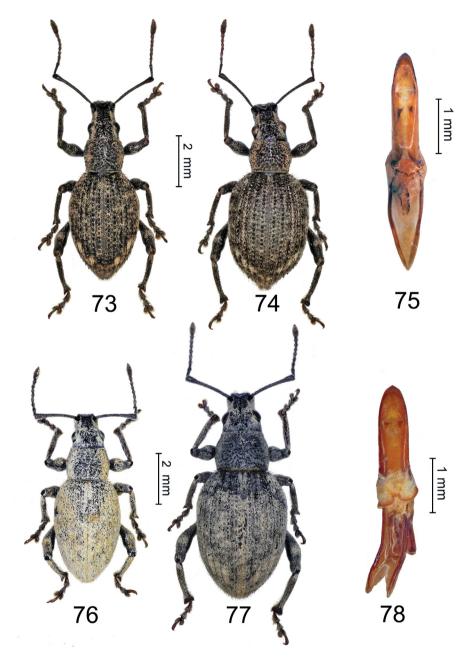
*Pronotum* 1.24 times wider than long, widest just apicad of middle, flat dorsally in lateral view; anterior margin almost as wide as somewhat flanged basal one; sides moderately rounded; disc with large irregularly roundish smooth flattened granules becoming little smaller and denser on sides and with shallow median low carina on apical half. Scutellum extremely minute, almost invisible.

*Elytra* elongate-oval, 1.45 times longer than wide, 1.78 times as wide as pronotum, maximum width at basal third, disc almost flat, apical declivity abrupt and ending with slightly acute angle; striae formed by rather regular rows of irregularly subquadrate large punctures; intervals not wider than striae, surface quite irregular and little convex, interval VII with some acute rasp-like granules on apical quarter.

Legs moderately elongate, rather sparsely clothed by partly erect whitish setae and partly recumbent narrowly elongate scales which also form pale femoral white middle ring; tibiae slightly curved inwards towards apex and with some stiff blackish setae originating from minute rasp-like granules, particularly numerous on metatibiae, all tibiae with apical mucro, one of protibiae minute, whereas that of meso- and particularly of metatibiae is rather acute; tarsi robust with rather sparse erect thin and stiff semirerect longer setae, tarsomere I longer and slightly wider than II which is longer than wide, tarsomere III bilobed and as long as wide, tarsomere IV projecting from III by little more length of III.

*Ventral side* with recumbent narrowly lanceolate quite sparse whitish scales on prosternum and mesoventrite, metaventrite and abdominal ventrites with some slanted sparse hair-like setae in middle; metaventrite and ventrite I with large common median depression.

**Variability.** Paratypes are very similar to the holotype, their dorsal pattern being more or less evident. Elytra of females are broader and more convex (Fig. 74), and their abdomen has no depressions.



Figs 73–78. 73–75 – *Nesotocerus labeculatus* sp. nov.: 73 – habitus of the holotype; 74 – habitus of a female paratype; 75 – aedeagus of a paratype in dorsal view. 76–78 – *Nesotocerus griseovestitus* sp. nov.: 76 – habitus of the holotype; 77 – habitus of a female paratype; 78 – aedeagus of a paratype in dorsal view.

*Male genitalia*. Aedeagus as depicted in Fig. 75. *Body length* 4.1–7.8 mm.

**Differential diagnosis.** This species is readily differentiated from the other three Socotran *Nesotocerus* species by its peculiar dorsal pattern with U-shaped band at the beginning of elytral declivity and here with erect scales not longer than the width of one elytral interval. Most of the males from Aloove area have elytra more flattened than those of the holotype. See also the key below. It is possible that the female specimen of *Nesotocerus* sp. figured by Wranik (2003: pl. 178, fig. d) as '*Parasystates* sp.' belongs to this relatively common weevil.

**Etymology.** The species name, Latin adjective *labeculatus* (-*a*, -*um*), meaning 'bearing stain, blemish', refers to the maculate band of the elytra.

**Distribution.** Endemic to Socotra Island.

## Nesotocerus griseovestitus sp. nov.

(Figs 76–78)

Type material. Holotype:  $\circlearrowleft$  (NMPC), 'Yemen, Socotra Island // Noged plain (sand dunes) // Sharet Halma vill. env. // 12°21.9′N, 54°05.3′E, 20 m // Jiří Hájek leg. 10-11.xi.2010'. Paratypes:  $1 \circlearrowleft 6 \circlearrowleft \varphi$ , same label data as holotype (5 NMPC, 1 ECRI);  $2 \circlearrowleft 3 \circlearrowleft \varphi$ , 'Yemen, Socotra Island, // Noged plain (sand dunes), // Sharet Halma vill. env., // 12°21.9′N, 54°05.3′E, 20 m, // J. Bezděk leg., 10-11.xi.2010' (NMPC);  $1 \circlearrowleft$ , 'Yemen, Socotra Island, // Noged plain (sand dunes), // Sharet Halma vill. env., // 12°21.9′N, 54°05.3′E, 20 m, // J. Bezděk leg., 10-11.xi.2010 // Alcohol 70% + acetic acid' (NMPC);  $1 \circlearrowleft$ , 'Yemen, Socotra Island, // Noged plain (sand dunes), // Sharet Halma vill. env., // 12°21.9′N, 54°05.3′E, 20 m, // J. Bezděk leg., 10-11.xi.2010 // Noged plain (sand dunes) // Sharet Halma vill. env., // 12°21.9′N, 54°05.3′E, 20 m, // Jan Batelka leg. 10-11.xi.2010' (JBPC); 27  $\circlearrowleft$  'Yemen, Socotra Noged // plain (plain), Sharet // Halma vill. env., 34 m // 12°22.9′N, 54°07.0′E // 10.xi.2010, P. Hlaváč leg.' (37 NMPC, 12 ECRI); 35  $\circlearrowleft$  28  $\circlearrowleft$  'Yemen, Socotra Island // Noged plain, Abataro // border of sand dunes and // shrubland 12-13.vi.2012 // 12°22.1′N, 54°03.4′E, 20 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (46 NMPC, 4 BMNH, 12 ECRI); 4  $\circlearrowleft$  6  $\circlearrowleft$  'Yemen, Socotra Island, // Deiqub cave env. // V. Hula & J. Niedobová leg. // 10.vi.2010' (7 NMPC, 3 ECRI); 2  $\circlearrowleft$  'Yemen, Socotra Island, // Shibhon, 680 m // N 12°28′1.5″, E 53°58′31″ // 13.vi.2009, L. Purchart leg.' (4 NMPC, 2 ECRI).

**Description.** *Male holotype*. Body length 5.3 mm. Piceous, quite shining, funiculus and femora dark brown, antennal club, tibiae and their apical comb of setae, and tarsi dark ferruginous. Dorsal surface densely covered by grey-yellowish recumbent lanceolate scales intermingled on upper surface of rostrum, head and pronotum with hair-like scales. Epifrons, dorsum of head and pronotal disc with sparser vestiture. On elytral declivity a series of suberect hair-like scales is on elytral intervals, and some long curved erect setae are at base on intervals VI and particularly VII. At base of head, on its under surface, on transverse sulcus between head and rostrum, and around eyes scales are larger and pearly-white. A vague series of patches of denser scales on elytral declivity. Ventral surface with same dense clothing as on upper side (Fig. 76).

*Head.* Rostrum hardly wider than long, sides barely converging from base to moderately protruding pterygia. Epifrons slightly convex, rather coarsely punctured at base and becoming smoother towards crescent sulcus between scrobes, at narrowest point about 0.73 times as wide as of rostrum between antennal insertion, with dorsal carina and with sides weakly

keeled. Epistome V-shaped, smooth, and separated from epifrons by weak sulcus. Head separated from rostrum by V-shaped feeble sulcus, distance between eyes a little greater than that between antennal insertion, space between eyes faintly depressed and with weak rather short longitudinal sulcus, vertex hardly convex, finely transversely strigose at extreme base, and apically punctured, temples about half as long as greater diameter of eye and hardly converging forward. Eyes large, elliptical and convex. Antennae relatively thick; scape just little curved and moderately clubbed; funicular antennomere I 2.08 times longer and hardly wider than II, antennomeres II to VII progressively diminishing in length, antennomeres III to V slightly longer than wide, antennomeres VI and VII about as long as wide; club fusiform, about as long as three preceding antennomeres.

Prothorax 1.28 times wider than long, sides little rounded, widest just apicad of middle, quite flat dorsally; anterior margin hardly narrower than barely flanged basal one; disc with large, coarse punctures and relatively small irregular smooth flattened granules more numerous towards base and on sides and with longitudinal weak carina at middle. Scutellum barely visible.

*Elytra* oval, moderately elongate, 1.43 times longer than wide, about 1.55 times as wide as pronotum, maximum width at basal third, quite flat on basal half, then progressively more convex in profile, apical declivity almost perpendicular; striae formed by quite regular rows of subquadrate large punctures; intervals not wider than striae, smooth and little convex.

Legs relatively short; rather densely clothed by partly recumbent and partly slightly erect whitish setae, faint trace of femoral white middle ring; pro- and mesotibiae almost straight, metatibiae little curved inwards and very minutely granulated on inner margin; tarsi robust with erect thin and stiff semirerect longer setae, tarsomere I longer and slightly wider than II which is longer than wide, tarsomere III bilobed and as long as wide, tarsomere IV projecting from third by little more length of III.

*Ventral side* with recumbent lanceolate dense whitish scales on prosternum and mesoventrite, metaventrite and abdominal ventrites with some semierect moderately dense hair-like setae in middle; metaventrite and ventrite I with large common median depression.

**Variability.** Other males are very similar to the holotype. Elytra of females are more broadly oval and more convex on disc (Fig. 77), and their abdomen has no impressions. Appendages of paratypes may be more or less dark ferruginous, and the pronotal keel is more or less evident. In very fresh specimens there is a faint V-shaped whitish stripe at the level of elytral declivity, and two longitudinal pale bands on sides of pronotum.

Male genitalia. Aedeagus as depicted in Fig. 78.

Body length 5.6-7.5 mm.

**Differential diagnosis.** See identification key below.

**Collection circumstances.** In Noged plain, the new species was collected on *Indigofera* spp. shrubs (Fabaceae) (J. Hájek, pers. comm.).

**Etymology.** The species name, a composite Latin adjective *griseovestitus* (-a, -um), meaning 'with grey vestiture', refers to the clothing of dense scales of the new species.

**Distribution.** Endemic to Socotra Island.

#### Identification key to Nesotocerus species

#### Socotracerus gen. nov.

N. rectus sp. nov.

**Type species.** Socotracerus delumbis sp. nov., by present designation.

**Description.** Medium sized, from 4.3 to 5.5 mm. Vestiture from sparse to moderately dense hair-like to narrowly capitate scales, scales recumbent or erect on all elytral intervals. Rostrum clearly wider than long, hardly widening apically, pterygia moderately developed. Epifrons almost at level with head, sides hardly converging forward and obliquely sloping on sides, dorsum flat and with barely visible longitudinal middle carina, at base with shallow transverse sulcus. Epistome separated from epifrons by thin carina. Mentum bisetose, not pedunculate. Head short and convex, scrobes moderately large, pit-like and entirely visible from above, space between eyes with central short sulcus or pit, vertex punctured or striolate at extreme base. Eyes not very large, slightly elliptical and convex. Pronotum narrower than elytra, transverse, with flattened granules on disc, anterior and posterior margins truncate, sides rounded, disc slightly convex without anterior depression. Scutellum barely visible. Elytra elliptical, moderately convex on disc, 10-striate, base not carinate, apical declivity almost perpendicular at apex. Legs quite robust, femora clubbed, edentate, female tibiae rather strongly curved inwards at apical third, male tibiae much more so and with special features, internal apical angle of tibiae with stout mucro. Antennae of males with basal two funicular antennomeres only slightly differing in length and with special characters. Anterior coxae contiguous, intermediate ones separate by triangular process much narrower that diameter of coxa, hind coxae separated by space about length of metaventrite. Metatibial corbels open. **Differential diagnosis.** In the bisetose mentum and general shape, the new genus approaches Nematocerus Reiche, 1849, from which it is readily differentiated by the tibiae bent inwards at apical third and with small mucro in both sexes, and by the bizarre features of antennae and legs of males. Socotracerus gen. nov. is close to Nesotocerus gen. nov. from which it differs by its shorter rostrum, lack of specialized setae at base of lateral intervals of elytra,

disc of elytra convex also in males, rounded sides of pronotum, and special characters of male antennae and tibiae. No other periteline can be confused with the new genus. See below the key to Socotran genera of Peritelini.

**Etymology.** The name of the new genus alludes to its affinity with *Nematocerus*, and to the island of Socotra. Gender is masculine.

### Socotracerus delumbis sp. nov.

(Figs 79-81, 83)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra Island // Firmihin, 400-500 m // N 12°28′.27″, E 54°0′54″ // 22-25.vi.2009 // L. Purchart & J. Vybíral lgt.'. Paratypes: 3 ♂♂ 5 ♀♀, same label data as holotype (6 NMPC, 2 ECRI); 1 ♀, 'Yemen, Socotra Island E // Firmihin plato, 400-500 m // N 12°28′46″, E 54°00′49″ // V. Hula & J. Niedobová leg. // 18-19.vi.2010' (NMPC); 1 ♀, 'Yemen, Soqotra Is.; // 1.2.xii.2003 // Dixam plateau; Sirhin area, // N 12°31′08″ E 53°59′09″ // 812 m [GPS]; Jan Farkač lgt.', 'Yemen - Soqotra // 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 ♀, 'Socotra (YE) // Dixam // 28.I.2008 - R. Sindaco' (MCCI); 1 ♀, 'Yemen, Socotra // Dixam plateau Firmihin // (Dracaena forest) 490 m // 12°28.6′N, 54°01.1′E // 15-16.xi.2010 // P. Hlaváč leg.' (NMPC); 1 ♂, 'Yemen, Socotra Island // Deiqub cave, 12.vi.2012 // cave & Croton socotranus + // Jatropha unicostata shrubland; // 12°23.1′N, 54°00.9′E, 115 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype.* Body length 5.2 mm. Pitchy-brown, somewhat shining, antennae and tarsi dark ferruginous, apical comb of setae of tibiae and claws honey-red. Dorsal side rather sparsely covered by curved recumbent brownish and golden hair-like scales, intermingled with almost recumbent whitish to golden-greenish capitate scales which on elytral intervals are erect and give rise to vague patches and faint longitudinal stripes along suture and interval V on elytral declivity. Ventral surface with sparse erect golden setae (Figs 79–80).

Head. Rostrum 0.85 times as long as wide, sides barely converging from base to mode-rately protruding pterygia. Epifrons slightly depressed, at narrowest point hardly narrower than rostrum between antennal insertions, with barely visible trace of dorsal carina, sides with weak smooth keel. Epistome V-shaped and separated from epifrons by thin carina. Scrobes quite short. Head separated from rostrum by transverse weak sulcus, distance between eyes greater than that between antennal insertion, space between eyes flat and longitudinally sulcate, vertex convex, basally finely strigose and apically punctured, temples shorter than greater diameter of eye and slightly widening posteriorly. Eyes large, elliptical and convex. Antennae rather thin; scape slightly curved and gradually clubbed; funicular antennomere I 1.17 times longer and hardly wider than II, antennomere II curved and apically widened at inner margin, antennomeres II to VII barely diminishing in length, all longer than wide; club fusiform elongate, little shorter than three preceding antennomeres.

*Pronotum* 1.14 times broader than long, widest just apicad of middle, slightly convex dorsally in lateral view; anterior margin as wide as basal one; sides rounded; disc with irregular smooth flattened granules becoming smaller and denser on sides and with smooth carina in middle. Scutellum barely visible.

*Elytra* elongate oval, 1.54 times longer than wide, 1.62 times as wide as pronotum, moderately convex on basal two thirds, apical declivity almost perpendicular; striae formed by large subquadrate punctures; intervals not wider than striae, subrugulose and little convex.

Legs rather elongate; femora clubbed, edentate, sparsely clothed by recumbent and slightly erect whitish setae, basal third of profemora and basal 4/5 of mesofemora with long erect setae; protibiae quite strongly curved on apical half, their inner margin setose and incised on apical half and at base of incision with tuft of long setae, mesotibiae moderately so and also with long setae, metatibiae with their apical 2/3 curved and a little twisted, side facing elytra with smooth and bare surface; tarsi quite short with erect thin microsetae and stiff erect longer setae, tarsomere I longer and slightly wider than second which is longer than wide, tarsomere III bilobed and as long as wide, tarsomere IV projecting from third by slightly more than its length, claws fused in basal half.

*Ventral side*. Metaventrite and abdominal ventrite I with large rather deep common impression, rest of ventrites convex in middle.

**Variability.** Other males are almost identical to the holotype. Elytra of females are broadly oval and strongly convex on disc (Fig. 81), their legs are lacking special features and their abdomen is not impressed. The vestiture is somewhat variable, since in some paratypes elytral spots are more evident. In fully mature specimens the colour of the integument is piceous, and tibiae and antennae are darker than those of the holotype.

Male genitalia. Aedeagus as depicted in Fig. 83.

Body length 4.1–5.5 mm.

**Differential diagnosis.** This species is easy to identify from *Socotracerus contortipes* sp. nov. described below already by its piceous colour and vestiture formed by scales instead of setae. **Etymology.** The species name, Latin adjective *delumbis* (-*is*, -*e*), meaning 'lame', was chosen in reference to the bent male tibiae of this new species.

**Distribution.** Endemic to Socotra Island.

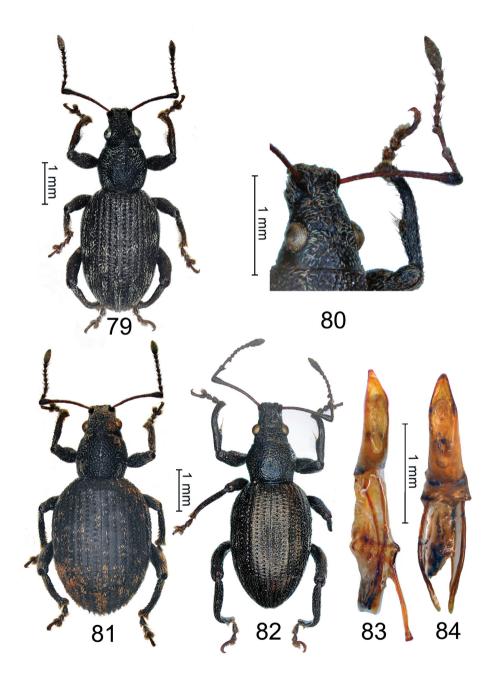
## Socotracerus contortipes sp. nov.

(Figs 82, 84)

Type material. HOLOTYPE: 3 (NMPC), 'Yemen, Socotra Island E // Kesa env., 220-300 m // N 12°39′37″, E 53°26′42″ // 28-29.i.2010, L. Purchart lgt.'. PARATYPE:  $1 \subsetneq$ , same label data as holotype (NMPC).

**Description.** *Male holotype*. Body length 4.9 mm. Piceous, shining, head and pronotum with feeble, elytra with strong brassy lustre, antennae and tarsi ferruginous, apical comb of setae of tibiae and claws honey-red. Dorsal side rather sparsely covered by recumbent thin golden setae. Ventral surface with sparse erect golden setae (Fig. 82).

Head. Rostrum 0.89 times as long as wide, sides feebly converging from base to mode-rately protruding pterygia. Epifrons slightly depressed, at narrowest point hardly narrower than rostrum between antennal insertion, with barely visible wide dorsal carina, sides with weak keel. Epistome crescent-shaped and separated from epifrons by thin carina. Scrobes short. Head separated from rostrum by transverse weak sulcus, distance between eyes much greater than that between antennal insertion, space between eyes flat and with an elongate pit, vertex convex, finely punctured, temples shorter than greater diameter of eye and slightly widening posteriorly. Eyes large, elliptical and convex. Antennae rather thin; scape weakly curved and moderately clubbed; funicular antennomere I 1.25 times longer and hardly wider than II, its inner margin with spine bearing tuft of long setae, antennomere II curved and apically widened at inner margin and here with some long setae, antennome-



Figs 79–84. 79–81, 83 – *Socotracerus delumbis* sp. nov. 79 – habitus of the holotype; 80 – head, antenna and right fore legs of the same; 81 – habitus of a female paratype; 83 – aedeagus of a paratype in dorsal view. 82, 84 – *Socotracerus contortipes* sp. nov., holotype. 82 – habitus; 84 – aedeagus in dorsal view.

res II to VII of about same length, all longer than wide; club fusiform elongate, as long as three preceding antennomeres.

*Pronotum* 1.14 times broader than long, widest apicad of middle, feebly convex dorsally in lateral view; anterior margin as wide as basal one; sides quite strongly rounded; disc with irregular smooth flattened granules becoming smaller and denser on sides. Scutellum barely visible.

*Elytra* elongate-oval, 1.61 times longer than wide and 1.61 times as wide as pronotum, moderately convex in basal two thirds, apical declivity perpendicular; striae formed by roundish punctures; intervals slightly wider than striae, finely transversely strigose and almost flat.

Legs similar to those of preceding species, with all tibiae even more strongly curved.

*Ventral side.* Metaventrite and abdominal ventrite I with large deep common impression, rest of ventrites convex in middle.

Male genitalia. Aedeagus as depicted in Fig. 84.

**Distribution.** Endemic to Socotra Island.

**Variability.** The female is similar to the holotype, but its elytra are broadly oval and strongly convex on disc, and its legs and antennae do not show special features. Body length 5.2 mm. **Differential diagnosis.** Metallic colour, hairy vestiture and even more bizarre characters of the male distinguish at once *S. contortipes* sp. nov. from the close *S. delumbis* sp. nov. (Figs 79–84).

**Etymology.** The species name, the composite Latin noun *contortipes* given in apposition, meaning 'crooked leg', refers to the bizarre shape of male tibiae of the new species.

#### Socotracerus sp. 1

**Material examined** (2 spec.). **YEMEN: Socotra Island:** Momi-Homhil, 2.vi.2010,  $1 \, \stackrel{\frown}{\hookrightarrow} \, \text{N}$ . Hula & J. Niedobová leg. (NMPC); Homhil area,  $12^{\circ}34'25\text{N}$   $54^{\circ}18'53''\text{E}$ , 400-510 m, 9.-10.ii.2010, 1 immature  $\stackrel{\frown}{\hookrightarrow}$ , L. Purchart & J. Vybíral leg. (NMPC).

**Notes.** These females have elytra a little longer than prothorax compared to those of the extremely close *N. delumbis* sp. nov. In addition they are larger (5.8 and 6.8 mm, respectively), but in the absence of additional specimens and especially of males it is impossible to be sure whether they are a different species or a form of the preceding one.

#### Socotracerus sp. 2

Material examined (1 spec.). YEMEN: Socotra Island: Deiqub cave env., 10.vi.2010, 1  $\circlearrowleft$ , V. Hula & J. Niedobová leg. (NMPC).

**Notes.** This single immature female too is very close to *N. delumbis* sp. nov., only differing by its denser suberect setae and smaller punctures of elytral striae.

### Socotractus gen. nov.

**Type species.** Systates angusticollis Taschenberg, 1883, by present designation.

**Description.** Small to medium size from 3.17 to 6.87 mm. Vestiture of moderately dense lanceolate to very elongate partly golden scales and more or less erect hair-like scales. Rostrum subparallel sided, subtriangularly narrowing apically, pterygia feebly developed, scrobes foveiform and closed forward. Epifrons dorsally flat or moderately convex and with weak

median carina, at base with rather deep transverse sulcus, level of epifrons higher than that of head in profile. Epistome smooth, not clearly distinct from epifrons and gradually sloping towards apex. Mentum bisetose. Scape clubbed and slightly to strongly compressed dorsoventrally, its surface somewhat strigose, funicular antennomere I inserted on its ventral side. Head short, scrobes moderately large, in the form of elongate pit and entirely visible from above, vertex at extreme base striolate, eyes rather small, slightly elliptical and strongly convex. Pronotum much narrower than elytra, not or slightly transverse, with sparse deep rather large punctures sometimes separated by small flat granules, anterior and posterior margins truncate, sides not or moderately rounded, disc slightly convex with feeble anterior depression. Scutellum invisible. Elytra oval or elliptical, 10-striate, apical declivity continuing outline of elytra. Intervals at least on female with feeble to moderate protuberances. Legs elongate, femora moderately clubbed, edentate, tibiae slightly curved inwards in apical third, internal margin somewhat mucronate apically. Procoxae contiguous, mesocoxae separate by elongate process much shorter that diameter of coxa, metacoxae widely separate by space about twice length of metaventrite. Metatibial corbels open.

**Differential diagnosis.** The combination of bisetose mentum, subparallel sided rostrum triangularly narrowing towards apex, foveiform small scrobes feebly protruding laterally and closed forward, epistome ill-defined, barely sloping forward and not separate from epifrons, deep thin transverse sulcus between interocular space and rostrum, small convex eyes, elytral intervals with weakly to moderately protruding tubercles at least in females, and mucronate tibiae make it impossible to confuse this new genus with any other Palaearctic or Afrotropical Peritelini.

**Etymology.** The name alludes to the island of Socotra and to the genus *Epactus*. Gender is masculine.

# Socotractus angusticollis (Taschenberg, 1883) comb. nov.

(Figs 85-88)

Systates angusticollis Taschenberg, 1881: 179; Gahan (1903): 283; Perrin (2000): 423; Wranik (2003): 362.

Type material examined. Lectotype (here designated): \$\(\delta\) (4.5 mm, MLUH), 'Wadi Kischen // 25.' [handwritten], 'Lectotypus \$\(\delta\) // Systates angusticollis Taschenberg, 1883 // E. Colonnelli des., 2012' [red, partly printed], 'Socotractus // angusticollis Taschenberg // E. Colonnelli det., 2012' [white, partly printed]. The specimen (Fig. 85) is placed after the collection label of Fig. 87, and although Taschenberg (1883) in the original description did not report any locality, it actually comes from 'Wadi Kischen' (Fig. 86), presently wadi Qishn, (12°34'N, 54°02'E).

Material examined (318 spec.). YEMEN: SOCOTRA ISLAND: Al Haghier Mts., Scant Mt. env., 12°34.6′N 54°01.5′E, 1450 m, 12.–13.xi.2010, 91 spec., P. Hlaváč leg. (87 NMPC 4 ECRI); same label data, 22 spec., J. Bezděk leg. (20 NMPC, 2 ECRI); same label data, 15 spec., L. Purchart leg. (12 NMPC, 3 ECRI); same label data, 9 spec., J. Hájek leg. (7 NMPC, 2 ECRI); same label data, 51 spec., J. Batelka leg. (45 JBPC, 6 ECRI); same locality, evergreen montane woodland, 16.-18.vi.2012, 39 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (36 NMPC, 4 ECRI); Al Haghier Mts., W slopes, Skant area, 12°33.52′N 54°00.01′E, 900–1240 m, on *Cephalocroton socotranus*, 2.ii.2003, 1 spec., P. Kabátek leg.(NMPC); Hagher Mts., Scant, 12°34.557′N 54°01.514′E, 1300-1500 m, 7.-8.vi.2010, 4 spec., V. Hula & J. Niedobová leg. (3 NMPC, 1 ECRI); Al Haghier Mts., wadi Madar, 12°33.2′N 54°00.4′E, 1180–1230 m, 12.–14.xi.2010, 11 spec., J. Bezděk leg. (9 NMPC, 2 ECRI); same label data, 21 spec., P. Hlaváč leg. (10 NMPC, 11 ECRI); same locality, 13.–14.xi.2010, 6 spec., L. Purchart leg. (5 NMPC, 1 ECRI); same locality, 1170 m, montane shrubland with *Cephalocroton socotranus*, 18.vi.2012, 10 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (8 NMPC, 2 ECRI); Dixam plateau, Sirhin area, 12°31′08″N 53°59′09″E, 812 m, 1.–2.xii.2003, 2 spec., P. Kabátek leg. (NMPC); Dixam plateau, Tudhen, 1135 m, shrubland with *Commiphora planifirons*, 18.–22.vi.2012, 35 spec., J. Bezděk, J. Hájek, V. Hula,

P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (30 NMPC, 5 ECRI); Homhil protected area, 12°34″27′N 54°18′32″E, 364 m, 1 spec., P. Kabátek leg. (NMPC).

**Taxonomy.** This species is here moved from *Systates* Gerstaecker, 1871 to *Socotractus* gen. nov. as *Socotractus angusticollis* (Taschenberg, 1883), comb. nov., and selected as the type species of *Socotractus* gen. nov.

**Variability.** It appears to be a rather common weevil in the mountain range of Socotra, the variation of which, apart from the size, is rather low. Males have depressed elytra with almost even intervals, whereas females (Fig. 89) have feebly convex elytra and intervals with more or less developed, but always visible blunt tubercles on apical third.

Male genitalia. Aedeagus as depicted in Fig. 88.

Body length 4.3-6.2 mm.

**Collection circumstances.** The species is very common on *Leucas hagghierensis* Al-Gifri & Cortés-Burns (Lamiaceae) in Hagher mountains (J. Hájek, pers. comm.). One specimen was collected on *Cephalocroton socotranus* Balf. f. (Euphorbiaceae).

**Distribution.** Endemic to Socotra Island.

## Socotractus peteri sp. nov.

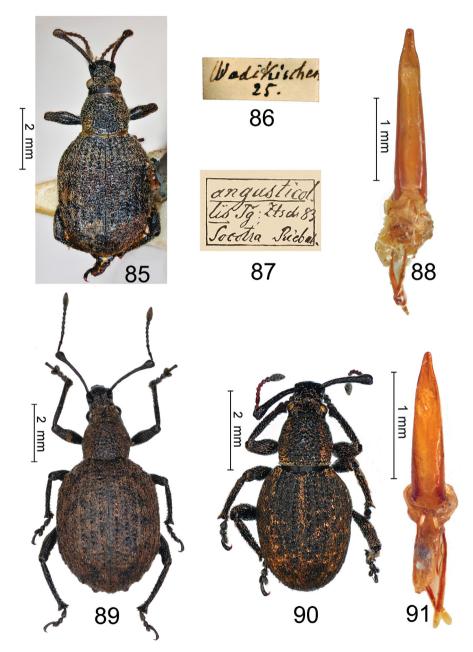
(Figs 90-91)

**Type material.** HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra // Al Haghier Mts., wadi // Madar, 1180-1230 m // 12°33.2′N, 54°00.4′E // 12-14.xi.2010, P. Hlaváč leg.'. PARATYPES: 2 ♂♂ 1 ♀ (2 NMPC, 1 ECRI).

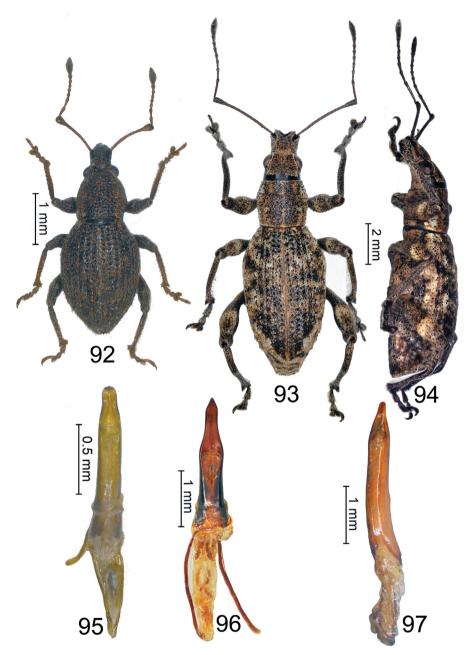
**Description.** *Male holotype*. Body length 4.7 mm. Piceous, opaque, funiculus and claws ferruginous, apical comb of setae brown. Dorsal surface moderately densely covered by golden recumbent lanceolate and hair-like scales, lanceolate ones forming two ill-defined longitudinal stripes on sides of pronotum and some scattered small patches on elytra. Epifrons, head and pronotal disc with sparser vestiture. Elytral intervals on declivity with a series of curved, half recumbent hair-like scales. Legs rather densely clothed by slightly to moderately erect golden setae, with faint trace of femoral light middle ring. Ventral surface with sparse erect golden setae, paler and more erect on meso- and metacoxae (Fig. 90).

Head. Rostrum hardly wider than long, sides barely converging from base to middle, then widening to moderately protruding pterygia. Epifrons almost flat, at narrowest point about 0.81 times as wide as of rostrum between antennal insertion, with coarse elongate punctures and keel from base to just basad of antennal insertion, then progressively smoother towards ill-defined epistome, sides gradually sloping. Head separated from rostrum by straight deep sulcus, distance between eyes almost twice than that between antennae at base, space between eyes faintly depressed and with deep elongate longitudinal sulcus, vertex hardly convex, finely transversely strigose at extreme base and apically punctured, temples hardly shorter than greater diameter of eye and slightly converging forward. Eyes moderately large, elliptical and convex. Antennae relatively thick; scape just little curved at base and moderately clubbed; funicular antennomere I hardly longer and barely wider than II, antennomeres III to VII progressively diminishing in length, antennomere VII not transverse; club fusiform, hardly shorter than three preceding antennomeres.

*Pronotum* 1.14 times wider than long, widest at middle, quite flat dorsally, sides little rounded, base with series of short semierect feather-like whitish scales, anterior margin



Figs 85–91. 85–89 – *Socotractus angusticollis* (Taschenberg): 85 – habitus of the male lectotype; 86 – locality label borne by the lectotype; 87 – collection label after which is placed the lectotype; 88 –aedeagus of a male from Wadi Madar in dorsal view; 89 – habitus of a female from Scant Mt. 90–91 – *Socotractus peteri* sp. nov., holotype: 90 – habitus; 91 – aedeagus in dorsal view.



Figs 92–97. 92, 95 – *Socotractus micans* sp. nov.: 92 – habitus of the holotype; 95 – aedeagus of a paratype in dorsal view. 93–94, 96 – *Systates hlavaci* sp. nov.: 93 – habitus of the holotype; 94 – habitus in side view; 96 – aedeagus of a paratype in dorsal view. 97 – *Systates spinipennis* sp. nov., aedeagus of a paratype in dorsal view.

little narrower than basal one; disc with irregular smooth flattened granules more numerous on sides.

*Elytra* oval, 1.36 times longer than wide, 1.60 times as wide as pronotum, maximum width at basal third, moderately depressed on basal half, then regularly convex in profile, base concave, apical declivity slightly acute in lateral view. Striae sulciform and formed by confuse rows of irregular rather large punctures. Intervals about twice as wide as striae, roughly granulate and little convex.

Legs quite elongate; femora clubbed; pro- and mesotibiae slightly curved inwards at apex, their internal margin with four rasp-like tubercles from each of which originates blackish stiff seta, metatibiae more strongly curved inwards, their inner margin granulate, meso- and metatibiae with internal acute laminate honey-red mucro at inner apical margin; tarsi robust with stiff semierect whitish thin microsetae, tarsomere I longer and slightly wider than II which is as wide as long, tarsomere III strongly bilobed and broader than long, tarsomere IV projecting from III by almost twice length of III.

*Ventral side.* Metaventrite and abdominal ventrite I with large common median depression extending also to metacoxae.

Male genitalia. Aedeagus as depicted in Fig. 91.

**Variability.** Paratypes are very similar to the holotype. The colour of scales on dorsal surface is golden and greenish instead of just golden as in the holotype, so that these specimens are more evidently mottled. The single female has some low blunt tubercles on odd elytral intervals and lacks of tibial mucros and abdominal impressions. In one of the males the base of elytra is not clearly depressed as in the other specimens.

Body length 4.3-5.2 mm.

**Differential diagnosis.** Size and general shape of this species approaches it to *Socotractus angusticollis*, from which it differs by less elongate antennae with not abruptly clubbed scape, elytra less broader that pronotum, much smaller and lower tubercles of female elytra, and differently shaped aedeagus (Figs 85–91). From *S. micans* sp. nov. the new species immediately differs by its dark colour and larger size.

**Etymology.** The new species is dedicated to Peter Hlaváč, Slovak specialist in Pselaphinae, who collected all the known specimens.

Distribution. Endemic to Socotra Island.

## Socotractus micans sp. nov.

(Figs 92, 95)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra island // Al Haghier Mts. // Skant Mt. env. // 12°34.6′N E 54°01.5′E // Jiří Hájek leg. 12-13.xi.2010'. Paratypes: 2 ♂ 2 ♀♀, same label data as holotype (3 NMPC, 1 ECRI); 2 ♂ 3 ♀♀, 'Yemen, Socotra island // Al Haghier Mts. // Skant Mt. env. // 12°34.6′N E 54°01.5′E // J. Bezděk leg. 12-13.xi.2010' (5 NMPC, 1 ECRI); 36 ♂ 3 16 ♀♀, 'Yemen, Socotra Island, // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16-18.vi 2012 // 12°34.6′N, 54°01.5′E, 1450 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (36 NMPC, 10 ECRI); 1 ♂, 'Yemen, Socotra Island // Skant area, 1300-1500 m // N 12°34′33″, E 54°01′31″ // 31.i-1.ii.2010, at light // L. Purchart lgt.' (NMPC); 1 ♂, 'Yemen, Socotra Isl., // Hagher Mts., Skant, // N 12°34,557′, E 054°01,514′ // 7-8.vi.2010, // V. Hula & H. Niedobová leg.' (NMPC); 4 ♂♂ 3 ♀♀, 'Socotra Is (YE) // Al Haghier Mts. Scant Mt. env. // 12°34.6′N, 54°01.5′E, 1450 m // Jan Batelka leg. 12-13.xi.2010' (6 JBPC, 1 ECRI); 11 ♂ ♂ 14 ♀♀,

'Yemen, Socotra // Al Haghier Mts. // Scant Mt. env.  $1450 \, \text{m} \, // \, 12^\circ 34.6 \, \text{N}, \, 54^\circ 01.5 \, \text{E} \, // \, 12-13.xi.2010, P. Hlaváč' (21 NMPC, 4 ECRI); 8 & $ 
'Yemen, Socotra island // Al Haghier Mts. // wadi Madar, 1180-1230 m / 12°33.2'N E 54°00.4'E // Jiří Hájek leg. 12-14.xi.2010' (NMPC); 22 & $ 
'Yemen, Socotra // Al Haghier Mts., wadi // Madar, 1180-1230 m // 12°33.2'N, 54°00.4'E // 12-14.xi.2010, P. Hlaváč leg. '(23 NMPC, 2 BMNH, 11 ECRI); 3 & $ 
'Yemen, Socotra Island, // Dixam plateau, Tudhen // shrubland with$ *Commiphora // planifrons*, 18+22.vi.2012 // 12°32.7'N, 53°59.9'E, 1135 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (2 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length 3.8 mm. Piceous, quite shining, antennae, club excepted, tibiae, apical comb of setae and tarsi ferruginous. Dorsal surface rather sparsely covered by recumbent comma-like, elliptical and hair-like scales, lanceolate ones forming two ill-defined longitudinal stripes on both sides of pronotum. On elytral declivity there are slightly curved erect capitate hair-like scales more evident and erect on prominences. Legs sparsely clothed by slightly to moderately erect golden setae, with barely perceptible trace of femoral middle ring. Ventral side with very sparse recumbent golden and greenish setae, slightly erect on meso- and metacoxae (Fig. 92).

Head. Rostrum 1.15 times longer than wide, sides subparallel, pterygia hardly protruding. Epifrons almost flat, at narrowest point about 0.48 times as wide as interocular distance, dorsum with coarse elongate punctures and poorly visible keel from base to just basad of antennal insertion, then alutaceous towards ill-defined epistome, sides somewhat keeled laterally, strongly converging up to just apicad of midlength of rostrum and then abruptly widening towards pterygia. Head separated from rostrum by broadly V-shaped deep sulcus, space between eyes slightly depressed and with deep elongate pit, vertex hardly convex, temples much shorter than greater diameter of eye and converging forward. Eyes moderately large, elliptical, protruding and with maximum of convexity basad of middle. Antennae slender; scape just little curved at base; funicular antennomere I scarcely longer and barely wider than II, antennomeres III to VII progressively diminishing in length, antennomere VII not transverse; club fusiform-oval, slightly shorter than three preceding antennomeres.

*Pronotum* 0.90 times wider than long, widest at middle, quite flat dorsally, sides regularly rounded, base and apex truncate and of about same width; disc with deep irregular large punctures.

*Elytra* oval, 1.39 times longer than wide, 1.58 times as wide as pronotum, maximum width at middle, rather flat on basal half, then moderately convex in profile, base slightly concave, apical declivity subperpendicular. Striae formed by large subquadrate deep punctures. Intervals not wider than striae, barely convex; suture with blunt prominence at middle of apical declivity, intervals III, V and VII with elongate moderately protruding low tubercles towards apical declivity.

Legs quite elongate; femora clubbed; tibiae mucronate, slightly curved inwards at apical quarter, their internal margin with few brown stiff setae apicad of middle, metatibiae with their inner margin minutely granulate; tarsi robust with some stiff semirerect whitish microsetae, tarsomere I longer and slightly wider than II which is as wide as long, tarsomere III strongly bilobed and wider than long, tarsomere IV projecting from III by almost twice length of III.

Ventral side. Metaventrite and abdominal ventrite I with common shallow median depression.

**Variability.** Paratypes are almost identical to the holotype. Females have elytral prominences a little more evident and lack abdominal impression. In some specimens elytral tubercles are more evident as erect scales on them are whitish.

Male genitalia. Aedeagus as depicted in Fig. 95.

Body length 2.7-4.3 mm.

**Differential diagnosis.** This species is immediately recognisable at once by it small size and obvious metallic golden vestiture. Other peculiar features are narrow rostrum with triangular ending, thin scape abruptly clubbed and only at apex barely compressed, and arrangement of elytral tubercles which are surmounted by tufts of erect scales.

**Etymology.** The species name, Latin participle *micans* meaning 'glittering, glowing, twinkling', was chosen in reference to the brilliant colour of the elytral scales.

**Distribution.** Endemic to Socotra Island.

### Systates Gerstaecker, 1871

## Systates hlavaci sp. nov.

(Figs 93, 94, 96)

Type material. HOLOTYPE: 3 (NMPC), 'Yemen, Socotra // Al Haghier Mts. // Scant Mt. env. 1450 m // 12°34.6'N, 54°01.5′E // 12-13.xi.2010, P. Hlaváč'. PARATYPES: 1 3, 'Yemen, Socotra Island, // Al Haghier Mts., // Scant Mt. env. 1450 m, // 12°34.6′N, 54°01.5′E, // L. Purchart leg. 12-13.xi.2010' (NMPC); 1 ♀, 'Yemen, Socotra Island, // Al Haghier Mts., // Scant Mt. env. 1450 m, // 12°34.6′N, 54°01.5′E, // Jiří Hájek leg. 12-13.xi.2010' (NMPC); 1 ♀, 'Yemen, Socotra Island, // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16-18.vi 2012 // 12°34.6'N, 54°01.5′E, 1450 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.', (NMPC); 6 ♂♂ 15 ♀♀, 'Yemen, Socotra // Al Haghier Mts., wadi // Madar, 1180-1230 m // 12°33.2′N, 54°00.4′E // 12-14.xi.2010, P. Hlaváč' (15 NMPC, 6 ECRI); 1 ♀, 'Yemen, Socotra Island, 18.vi // Hagher Mts., wadi Madar, 2012 // montane shrubland with // Cephalocroton socotranus // 12°33.2'N, 54°00.4'E, 1170 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 1 3, 'Yemen, Socotra Island, // Al Haghier Mts., // wadi Madar, 1180-1230 m // 12°33,2'N, 54°00.4′E // J. Bezděk leg. 12-14.xi.2010' (NMPC); 1 &, 'Yemen, Socotra Isl., Noged // GPS 12.318N, 53°678E, 250 m // 12–13.xi.2000 // leg. V. Bejček & K. Šťastný (NMPC); 1 ♀, 'Yemen, Socotra Isl., Shibon // GPS 12.4679N, 54°0023E, 666 m // 16.xi.2000 // leg. V. Bejček & K. Šťastný' (NMPC); 3 33, 'Yemen, Socotra Island // Diksam plateau, 850-920 m // N 12°31′24″, E 53°58′29″ // 5.ii.2010 // L. Purchart & J. Vybíral lgt. '(2 NMPC, 1 ECRI); 1 ♀, 'Yemen, Socotra Island // Skant area, 1300-1500 m // N 12°34'33", E 54°01'31" // 31.i.-1.ii.2010, at light // L. Purchart lgt.' (NMPC); 2 ♀♀, 'Yemen, Soqotra Isl., Sirhin area // Dixam plateau, 1-2.xii.2003, N // 12°31′08″ E 53°59′09″, 812 m // [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 Å, 'Yemen, Soqotra Is., Homhil // protected area, 28-29.xi.2003 // N 12°34'27" E 54°18'32", 364 // m [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC).

**Description.** *Male holotype.* Body length 9.3 mm. Piceous, rather shining, claws and apical comb of setae brown. Dorsal surface quite densely covered by recumbent golden, brownish and whitish round to lanceolate scales intermingled on upper surface of rostrum, head and disc of pronotum with few elongate scales giving rise to pattern of Fig. 93. Some poorly visible minute curved erect hair-like scales are scattered throughout all dorsum, but are particularly noticeable on elytral declivity. On sides of epistome there are some long translucent golden setae. Femora moderately densely clothed by recumbent partly narrow golden and partly oval whitish scales, latter forming vague white middle ring on external side; tibiae with recumbent small hair-like golden scales, internal side of protibiae with some dark erect stiff setae starting

from minute granules, whereas on that of meso- and metatibiae there is comb of soft curved long pale setae which starts from basal third of mesotibiae where is composed of longer setae, these shorter and limited to apical third of metatibiae. Prosternum, mesoventrite, and sides of metaventrite and abdomen with moderately dense recumbent golden-yellowish lanceolate scales; depression of metaventrite and midline of abdomen with sparse almost recumbent golden setae (Figs 93–94).

Head. Rostrum as long as wide, subparallel sided up to middle, then feebly diverging to form moderately protruding pterygia open forward. Epifrons almost flat, minutely and not very densely punctured, at narrowest point about 0.83 times as wide as of rostrum between antennal insertion, with broad blunt dorsal carina and with weakly keeled sides. Epistome deeply V-shaped, smooth, basally keeled and separated from epifrons by rather shallow sulcus. Head and rostrum separated by slightly concave fairly deep groove, space between eyes slightly depressed and with long narrow longitudinal sulcus ending just apicad of base of eyes, vertex hardly convex, finely transversely strigose at base, temples slightly shorter than greater diameter of eye. Eyes large, elliptical and moderately protruding from head convexity. Antennae thin; scape almost straight and barely clubbed; funicular antennomere I hardly 1.93 times longer and not wider than II, antennomeres II to VII slightly and progressively diminishing in length, all much longer than wide; club fusiform elongate, about as long as three preceding antennomeres.

*Pronotum* 1.11 times broader than long, sides moderately rounded, widest shortly apicad of middle, quite flat dorsally; anterior margin about as wide as basal one; disc with relatively small smooth quite convex granules irregularly distributed, and with faint trace of longitudinal median line. Scutellum invisible.

*Elytra* very elongate, 1.83 times longer than wide, about 1.62 times as wide as pronotum, maximum width at basal third, rather flat on dorsum and quite abruptly and subperpendicularly sloping towards apex; elytral sides moderately curved and converging towards blunt apex. Striae sulciform at base and formed by irregular rows of minute to moderately sized unequal more or less deep punctures. Intervals almost flat, III and V excepted, their surface quite uneven and somewhat tuberculate particularly at base of elytral declivity.

Legs quite elongate; femora clubbed; tibiae partly compressed and strongly curved inwards at apical third, protibiae with some acute granules along concavity of apical third, metatibiae strongly curved also on basal third and apicad of this curve thin and compressed, side facing elytra with bare smooth line; tarsi comparatively elongate and with hardly erect stiff long setae.

*Ventral side.* Metaventrite and abdominal ventrites I and II with very large common quite deep depression.

**Variability.** Males are very similar to the holotype. Females have elytra much more convex and oval, only 1.56 times as long as wide, and with their maximum width at middle, intervals are more strongly tuberculate and there is a somewhat conical low tubercle at the beginning of elytral declivity on suture. In addition their tibiae are much less curved inwards, and they lack abdominal impressions. The colour of dorsal pattern may be more or less contrasted.

Male genitalia. Aedeagus as depicted in Fig. 96.

Body length 8.1-11.0 mm.

**Differential diagnosis.** A very distinctive species by the combination of uneven surface of elytra, dorsal pattern, type of vestiture, rather unusual shape of the male metatibiae and strong sexual differences. Although some African *Systates* also sometimes have bizarre tibial features, none of them can be considered close to *S. hlavaci* sp. nov. Even if quite diverse, this new species appears somewhat related to the Socotran *S. spinipennis* sp. nov., the description of which follows.

**Etymology.** The new species is named after Peter Hlaváč who collected most of the specimens, as a sign of my friendship.

**Distribution.** Endemic to Socotra Island.

### Systates spinipennis sp. nov.

(Figs 97-99)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra // Al Haghier Mts. // Scant Mt. env. 1450 m // 12°34.6′N, 54°01.5′E // 12-13.xi.2010, P. Hlaváč'. Paratypes: 2 ♂ ♂ 1 ♀, same label data as holotype (2 NMPC, 1 ECRI); 1 ♀, 'Yemen, Socotra Island // Scant area, 1300-1500 m // N 12°34.33′, E 54°01.31′, // 31.i-1.ii.2010, L. Purchart lgt.' (NMPC); 1 ♀, 'Yemen, Socotra Island // Al Haghier Mts. // Scant Mt. env., 1450 m // 12°34.6′N, 54°01.5′E, // L. Purchart leg. 12-14.xi.2010' (ECRI); 4 ♂ ♂, 'Yemen, Socotra Island, // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16-18.vi 2012 // 12°34.6′N, 54°01.5′E, 1450 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (3 NMPC, 1 ECRI); 1 ♀, 'Yemen, Socotra Island// Al Haghier Mts. // wadi Madar, 1180-1230 m // 12°33.2′N, 54°00.4′E // Jiří Hájek leg. 12-14.xi.2010' (NMPC).

**Description.** *Male holotype*. Body length 10.2 mm. Piceous, moderately shining, claws dark ferruginous. Dorsal surface rather densely covered by recumbent golden, brownish and whitish round to lanceolate scales intermingled on upper surface of rostrum, head and disc of pronotum with hair-like scales forming vague pattern of Fig. 98. Vertex of head, epistome and rostrum basad of epistome bare; dorsal side of eyes and basal sulcus of rostrum with embricate small golden-yellowish scales. Femora sparsely clothed by recumbent partly narrow golden and partly oval whitish scales, latter forming vague white middle ring on external side; tibiae with scanty recumbent small hair-like golden scales, internal side with sparse erect pale setae and some stiff setae starting from minute granules, apical comb of setae golden-yellow. Ventral surface with sparse recumbent whitish lanceolate scales; depression of metaventrite and abdomen with apically curved dense erect golden setae (Figs 98–99).

Head. Rostrum 1.07 times longer than wide, parallel-sided up to a short distance apicad of middle, then diverging to form moderately protruding pterygia which are open forward. Epifrons almost flat, rather coarsely but not very densely punctured, at narrowest point about 0.77 times as wide as rostrum between antennal insertion, with dorsal carina and with sides weakly keeled. Epistome V-shaped, smooth, basally keeled, and separated from epifrons by rather deep sulcus. Head separated from rostrum by almost straight fairly deep narrow sulcus, space between eyes flat and with narrow long longitudinal sulcus ending at level of base of eyes, vertex hardly convex, finely transversely strigose at base, temples about as long as greater diameter of eye. Eyes large, elliptical and moderately protruding from head convexity. Antennae thin; scape almost straight and only slightly clubbed; funicular antennomere I 2.07 times longer and hardly wider than II, antennomeres II to VII slightly and progressively

diminishing in length, all much longer than wide; club fusiform elongate, 1.25 times as long as three preceding antennomeres.

*Pronotum* 1.19 times wider than long, sides rather strongly rounded, widest shortly apicad of middle, quite flat dorsally; anterior margin slightly narrower than basal one; disc with relatively small smooth quite convex granules irregularly distributed, and with faint trace of longitudinal median line. Scutellum almost invisible.

Elytra extremely elongate, twice as long as wide, about 1.75 times as wide as pronotum, maximum width at basal quarter, convex at base except for a strong depression around scutellar area, then quite flat up to large rather acute strongly protruding triangular tubercle which is situated on intervals I and II at beginning of very abrupt apical declivity, this last forming with dorsal surface of elytra slightly acute angle; elytral sides almost straight and rapidly diverging from base up to basal quarter, here rather strongly curved and then again approximately straight and converging towards preapical tubercles. Striae formed by extremely irregular rows of large unequal more or less deep punctures so that it is difficult to number them, lateral punctures more regularly subrectangular. Intervals poorly visible, their surface quite uneven and somewhat granulate, slightly convex and about as wide as striae in areas where intervals are more evident.

Legs quite elongate; femora clubbed; tibiae strongly curved inwards on apical third, with some minute acute granules apicad of basal third; tarsi robust with hardly erect stiff long setae.

*Ventral side.* Metaventrite and abdominal ventrites I and II with very large common depression limited on sides by somewhat carinate edge.

**Variability.** Males are very similar to the holotype. Females lacks of abdominal setae and impressions, have elytra much more oval, only 1.76 times as long as wide and with their maximum width at middle, and tibiae much less curved inwards, particularly the anterior ones.

Male genitalia. Aedeagus as depicted in Fig. 97.

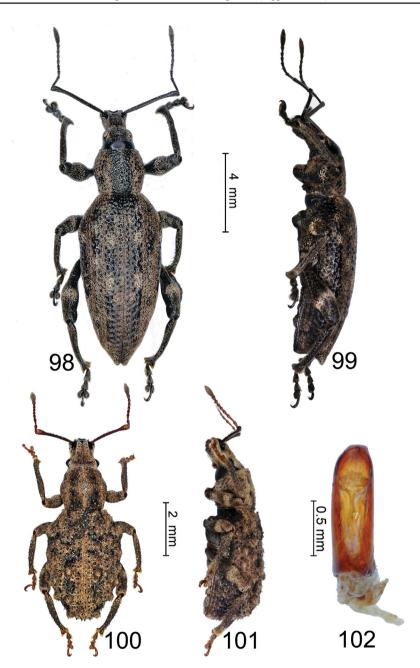
Body length 8.3-11.2 mm.

**Differential diagnosis.** Large acute tubercle at the beginning of elytral declivity, very elongate body, vestiture, weakly developed sexual differences make this species instantly recognisable among the several described African species. *Systates spinipennis* sp. nov., in addition to the completely different male tibiae, is easily separate from the above other Socotran species by much longer rostrum, extremely elongate male elytra, much protruding tubercle above slightly acute perpendicular apical declivity of elytra, not or only slightly uneven elytral surface. *Systates spinipennis* sp. nov. has much the appearance of some *Otiorhynchus* subgenus *Aranihus* Reitter, 1912, an Otiorhynchini the members of which are distributed primarily in southern Spain and Morocco (Magnano 2003, 2009; Germann 2004; Magnano & Alonso-Zarazaga 2013), being immediately differentiated already by its connate claws.

**Etymology.** The species name, the composite Latin adjective *spinipennis* (-*is*, -*e*), meaning 'with spinose elytra', was chosen in reference to the elytral tubercles of the new species.

**Collection circumstances.** Few adults were found at night on *Leucas hagghierensis*, while other specimens were found on bare branches of unknown tree in the highest parts of the Hagher mountains (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.



Figs 98-102. 98-99 – *Systates spinipennis* sp. nov., holotype: 98 – habitus; 99 – habitus in side view. 100-102 – *Tuberates pustulatus* sp. nov.: 100 – habitus of the holotype; 101 – habitus of the holotype in side view; 102 – aedeagus of a paratype in dorsal view.

### Tuberates gen. nov.

**Type species.** *Tuberates pustulatus* sp. nov., by present designation.

**Description.** Medium size from 5.9 to 8.1 mm. Thick vestiture composed of roundish scales intermingled on head and pronotum with almost recumbent curved hair-like ones, elytral intervals with embricate scales intermingled with some capitate erect narrow ones. Rostrum subquadrate, slightly widening apically, pterygia moderately developed and open in front. Epifrons rather abruptly angularly sloping on sides particularly towards antennal insertion, dorsum longitudinally depressed, level of epifrons higher than that of interocular area. Epistome short, broadly subtriangular, abruptly sloping forward and separated from epifrons by thin broadly U-shaped carina. Mentum quadrisetose. Scape scaled and bearing erect capitate setae. Head large, divided from rostrum by almost straight transverse sulcus, scrobes moderately large, in the form of a subtrapezoidal pit and entirely visible from above, space between eyes depressed and sulcate, eyes slightly elliptical and subconically convex. Pronotum narrower than elytra, almost as long as wide, uneven surface of disc completely concealed by vestiture, anterior and posterior margins subtruncate, sides rounded, disc almost flat and depressed basad and apicad of its centre. Scutellum barely visible. Elytra subrectangular with interval IX angularly dilated apicad of shoulders, barely convex on disc, 10-striate, apical declivity almost perpendicular. Intervals bearing a series of large uneven blunt tubercles. Legs rather elongate, femora moderately clubbed, edentate, tibiae slightly curved inwards at apical third, internal margin at least in part spinulate and mucronate apically, claws fused at base. Metatibial corbels open. Procoxae contiguous, mesocoxae separate by thin longitudinal bulging process, metacoxae widely separate by space slightly more than length of abdominal ventrite I. Anterior margin of ventrite I strongly arcuate towards metaventrite, ventrites II to IV convex and slightly differing in length, sutures between them straight, ventrite V crescent-shaped and slightly longer that combined length of III+IV. **Differential diagnosis.** This is a very isolate genus impossible to confuse with any other Peritelini by the combination of quadrisetose mentum, dense peculiar vestiture, concave rostrum, pronotal impressions, tuberculate elytra, and at least in part spinulate meso- and metatibiae. See also an identification key above.

**Etymology.** The name alludes to the elytral tubercles and to the genus *Systates*, the members of which have also quadrisetose mentum. Gender is masculine

### Tuberates pustulatus sp. nov.

(Figs 100–102)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra Island // Hagher Mts., Skant, // N 12°34.557″, E 54°01.514″ // V. Hula & J. Niedobová leg. // 7-8.vi.2010'. Paratypes: 7 ♂ ♂ 7 ♀♀, same label data of holotype (8 NMPC, 2 BMNH, 5 ECRI); 1 ♀, 'Yemen, Socotra Island // Al Haghier Mts. //, Skant Mt. env. // 12°34.6′N, 54°01.5′E // J. Bezděk leg. // 12-13.xi.2010' (NMPC); 1 ♂ 1 ♀, 'Yemen, Socotra Island // Al Haghier Mts. Skant Mt. env. // pitfall trap // 12°34.6′N, 54°01.5′E, 1450 m // 1.ii.-13.xi.2010, L. Purchart leg.' (NMPC); 1 ♀, 'Yemen, Socotra Island // Al Haghier Mts. //, Skant Mt. env. // 12°34.6′N, 54°01.5′E // Jiří Hájek leg. // 12-13.xi.2010' (NMPC); 1 ♂ 1 ♀, 'Yemen, Socotra // Al Haghier Mts. // Scant Mt. env. 1450 m // 12°34.6′N, 54°01.5′E // 12-13.xi.2010, P. Hlaváč' (NMPC); 2 ♂ ♂ 3 ♀♀, 'Yemen, Socotra Island, // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16-18.vi 2012 // 12°34.6′N, 54°01.5′E, 1450 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (4 NMPC, 1 ECRI); 1 ♀, 'Yemen, Socotra Island, 18.vi // Hagher Mts., wadi Madar, 2012 // montane shrubland with // Cephalocroton socotranus // 12°33.2′N, 54°00.4′E,

1170 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype*. Body length 6.0 mm. Piceous, antennae, apex, apical comb of tibiae and tarsi honey-red. Dorsal surface of head and pronotum densely covered by subrecumbent intermingled oval, lanceolate and hair-like brownish, dirty yellowish and golden scales, which on pronotal disc are arranged in kind of 'waves' on its unequal surface; elytra with slightly erect embricate primarily golden and with some brownish round scales in addition to some suberect capitate whitish scales on tubercles forming vague pattern of Fig. 100. Ventral side with recumbent dense elongate golden-yellowish scales on middle of prosternum and mesoventrite and on sides of abdominal ventrites in addition to semierect very long hair-like scales particularly dense on middle of metaventrite and ventrites; similar scales are on coxae (Figs 100–101).

Head. Rostrum 0.93 times as long as wide, sides slightly diverging forward, scrobes weakly protruding. Epifrons slightly concave, at its narrowest point half as wide as interocular distance, sides converging to antennal insertion and somewhat keeled, dorsum with weak longitudinal carina. Epistome U-shaped, smooth, and with thin carina behind. Antennae slender; scape almost straight and moderately clubbed at apex; funicular antennomere I about one half shorter and not broader than II, antennomeres III and VII slightly longer than IV to VI, all clearly longer than wide; club fusiform and slightly shorter than three preceding antennomeres. Head large, space between eyes slightly depressed and sulcate. Eyes quite small, subconically moderately convex.

*Pronotum* 0.96 times as long as wide, widest shortly apicad of middle, barely convex dorsally, sides rather strongly and subangularly rounded, apex slightly convex, base truncate and of about same width of apex; disc with four rather large shallow impressions on each side of midline which shows a large very shallow depression at its centre, on lateral sides quite regularly punctured.

Elytra subrectangular, 1.44 times longer than wide, 1.63 times as wide as pronotum, maximum width at level of tubercles on basal quarter, almost flat on disc, apical declivity abruptly and subperpendicularly sloping, base concave, sides strongly widening and almost straight from base to protruding tubercles of interval IX placed at basal quarter, gently curved and undulate because of tubercles up to narrowly rounded apex. Striae not very regular, formed by rather large punctures. Intervals slightly wider than striae, their surface uneven, odd ones with series of unequal conical tubercles with blunt apex, suture with some weak tubercles on declivity.

Legs moderately elongate; femora moderately clubbed; protibiae rather strongly curved inwards at apical quarter and with some acute granules on which is inserted honey-coloured thin seta, granules becoming stronger on meso- and particularly metatibiae, all tibiae with rather acute mucro at apex of inner margin; tarsi robust.

*Ventral side*. Metaventrite and abdominal ventrites I and II with shallow common median depression.

**Variability.** Paratypes are essentially similar to the holotype. Females have elytra more convex and broader, tibiae less curved inwards, and lack abdominal impressions. The colour varies a little from almost brownish to more or less golden-brown.

*Male genitalia*. Aedeagus as depicted in Fig. 102. *Body length* 6.3–8.1 mm.

**Etymology.** The species name, Latin adjective *pustulatus* (-*a*, -*um*) meaning 'blistered', is in reference to the 'pimpled' elytra of the new species.

**Collection circumstances.** Few specimens were found at night on *Leucas hagghierensis* Gifri & Cortés-Burns (Lamiaceae); other specimens were sifted from leaf litter in montane evergreen woodland on the highest parts of the Hagher mountains (J. Hájek, pers. comm.). **Distribution.** Endemic to Socotra Island.

### Tribe Tanymecini

#### Molybdotus Fairmaire, 1882

**Discussion.** Taxonomy of the subtribe Piazomiina of Tanymecini is presently being deeply revised, in particular for Palaearctic species, and a number of new genera, new species, and revised combinations have been recently published (e.g. Chao 1980; Chao & Chen 1980, 1981; Chen 1991; Magnano et al. 2009). All those authors stressed the importance of some tiny characters allowing precise definition of the genera close to *Piazomias* Schoenherr, 1840 for a more natural placement of the several species of Piazomiina hitherto described. On the contrary, no revisionary studies were made of the so far few African taxa described, for which we have only the outdated catalogue by Günther & Zumpt (1933) who listed Palaearctic and African species together. The quite subtle difference between *Piazomias* and *Molybdotus* Fairmaire, 1882, consisting of the presence in members of the latter genus of an often barely visible furrow separating the inner and outer part of metepisterna (Emden 1944), although not always easy to appreciate, may be used for dividing the Palaearctic species actually belonging to *Piazomias* from all the studied African ones which appear to belong to *Molybdotus*, including the Socotran species, here moved from *Piazomias* to *Molybdotus* as *Molybdotus* vermiculosus (Waterhouse, 1881), comb. nov.

PERRIN (2000) cited the Socotran species as *Molybdotus laxepunctatus* Fairmaire, 1882 described from the nearby Somalia, and since most probably was able to study Fairmaire's type(s) preserved in the Paris Museum, it is probable that *M. laxepunctatus* may prove to be a synonym of *M. vermiculosus*, although only the study of the types of both can solve this problem. It is worth noting, however, that Fairmaire (1882) described the scutellum of the Somali species as invisible, whereas that of *M. vermiculosus* is small, but clearly visible.

#### Molybdotus vermiculosus (Waterhouse, 1881) comb. nov.

(Figs 103-106)

Piazomias vermiculosus Waterhouse, 1881: 478; Gahan (1903): 282; Wranik (2003): 362. Piozomias [sic!] vermiculosus: Taschenberg (1881): 179. Molybdotus laxepunctatus Fairmaire, 1882 (suspected misidentification): Perrin (2000): 425.

Type material examined. Lectotype (here designated): ♀ (BMNH), body length 13.9 mm, Fig. 103: [round label circled in red with the printed word 'Type' at its centre] subsequently added by curators of the Museum, 'Socotra // [yellow transverse line] // 81·51' [handwritten], 'Piazomias // vermiculosus, // (Type) Waterh.' [handwritten, probably by Waterhouse] (Fig. 104), 'Lectotypus ♀ // Piazomias vermiculosus Waterhouse, 1881 // E. Colonnelli des., 2012' [red, partly printed], 'Molybdotus // vermiculosus Waterhouse // E. Colonnelli det., 2012' [white, partly printed].

Male paralectotype (12.0 mm) (BMNH): 'Socotra // [yellow transverse line] // 81·51' [handwritten], 'Paralectotypus & // Piazomias vermiculosus Waterhouse, 1881 // E. Colonnelli des., 2012' [red, partly printed], 'Molybdotus // vermiculosus Waterhouse // E. Colonnelli det., 2012' [white, partly printed]. Male paralectotype (13.0 mm) (BMNH): 'Socotra // [yellow transverse line] // 81·51' [handwritten], [white label on which is glued the abdomen and the aedeagus], 'Paralectotypus & // Piazomias vermiculosus Waterhouse, 1881 // E. Colonnelli des., 2012' [red, partly printed], 'Molybdotus // vermiculosus Waterhouse // E. Colonnelli det., 2012' [white, partly printed].

Additional material examined (279 spec.). YEMEN: SOCOTRA ISLAND: Jena-agahan, 1200 feet, Jan[uary] [18]99, 4 33, W. R. O. Grant. 99-85 (BMNH); Ayahft, 3.xi.2000, 5 spec., V. Bejček & K. Šťastný leg. (NMPC); Haghier Mts., Ayhaft, 500 m, 4.iii.2009, 1 spec., A. Saldaitis leg. (IRSB); Ayhft valley, 22.x.2008, 3 spec., A. Saldaitis leg. (IRSB); Haghier, 12.575 N, 54.022 E, 69 m, 4.-8.x.2000, 2 spec., V. Bejček & K. Šťastný leg. (NMPC); Lahas, 12.646 N, 54.091 E, 69 m, 17.-18.xi.2000, 2 spec., V. Bejček & K. Šťastný leg. (1 NMPC, 1 ECRI); Dikseheten, 5.iv.2001, 1 spec., V. Bejček & K. Šťastný leg. (NMPC); Wadi Hayhaft, N 12°36′38″, E 53°58′49″, 190 m, 24.–26. xi.2003, 12 spec., D. Král leg. (11 NMPC, 1 ECRI); same locality and date, 59 spec., J. Farkač leg. (53 NMPC, 6 ECRI); Wadi Hayhaft, 12°36.5'N, 53°58.9'E, 200 m, 7.-8.xi.2010, 11 spec., P. Hlaváč leg. (9 NMPC, 2 ECRI); same locality and date, 1 spec., J. Bezděk leg. (NMPC); Wadi Ayeft, 20.ii.2009, 2 spec., P. Lo Cascio & F. Grita leg. (PLFG); Qalansiyah env., Khayhra mts. N slopes, N 12°38′50″, E 53°27′45″, 85–592 m, 9.–10.xii.2003, 9 spec., J. Farkač leg. (7 NMPC, 2 ECRI): Oaariah vill. env., N 12°38′05″, E 54°12′39″, 11 m, 28.xi,2003, 3 spec., J. Farkač leg. (2 NMPC, 1 ECRI); Qalansiyah env., Ditwah (lagoon), N 12°41'42", E 53°30'08", 23 m, 9.xii.2003, 14 spec., D. Král leg. (12 NMPC, 2 ECRI); Gubbah vill. env., N 12°36′5″, E 53°46′56″, 7 m, 23.xi.2003, 11 spec., D. Král leg. (10 NMPC, 2 ECRI); same locality and date, 8 spec., J. Farkač leg. (6 NMPC, 2 ECRI); Calanthia, 29.–30.iii.2001, 2 spec., V. Bejček & K. Šťastný leg. (NMPC); Shuab, coast line, mangrove, 24.iii.2009, 1 spec., A. Saldaitis leg. (IRSB); Aloove area, Hassan vill. env., 12°31.2′ N, 54°07.4′ E, 221 m, 9.–10.xi.2010, 34 spec., J. Batelka leg. (30 JBPC, 4 ECRI); same locality and date, 3 spec., J. Hájek leg. (NMPC); same locality and date, 1 spec., J. Bezděk leg. (NMPC); same locality, 10.xi.2010, 20 spec., P. Hlaváč leg. (16 NMPC, 4 ECRI); Homhil protected area, N 12°34′27″, E 54°18′32″, 364 m, 28.–29.xi.2003, 2 spec., D. Král leg. (NMPC); Momil [misspelling for Hombil], 12.ii.2000, 1 spec., R. Argano leg. (ECRI); Hadiboh env., ca 10-100 m, N 12°39′02″, E 54°02′04″, 21.xi-13. xii.2003, 1 spec., D. Král leg. (NMPC); W Da'arho, 21.ii.2009, 1 spec., P. Lo Cascio & F. Grita leg. (PLFG); Near Dijoub cave, 22.ii.2009, 2 spec., P. Lo Cascio & F. Grita leg. (PLFG); Deiqub cave, 12°23.1'N, 54°00.9'E, 115 m, 12.vi.2012, Croton socotranus and Jatropha unicostata shrubland, 1 ♀, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (NMPC); Noged, 12.318 N, 53.687 E, 250 m, 12.-13.x.2000, 1 spec., V. Bejček & K. Šťastný leg. (NMPC); Noged plain, wadi Ireeh, N 12°23'11", E 53°59'47", 95 m, 6.-7.xii.2003, 2 spec., D. Král leg. (NMPC); same locality and date, 2 spec., J. Farkač leg. (1 NMPC, 1 ECRI); Suq. E env., (sand dune), N 12°40′02", E 54°03′45", ca. 20–170 m, 22.xi.2003, 1 spec., D. Král leg. (NMPC); same locality and date, 2 spec., J. Farkač leg. (1 NMPC, 1 ECRI); Elhe nursery, N 12°18′56.7", E 53°43′14.7", 90 m, 19.vi.2009, 1 spec., L. Purchart leg. (NMPC); Noged plain, Sharet Halma vill. env. (sand dunes), N 12°21.9′, E 54°05.3′, 20 m, 10.-11. xi.2010, 2 spec., J. Bezděk leg. (1 NMPC, 1 ECRI); same locality and date, 2 spec., L. Purchart leg. (NMPC); same locality and date, 3 spec., J. Hájek leg. (2 NMPC, 1 ECRI); same locality and date, 1 spec., J. Batelka leg. (JBPC); Noged plain, Sharet Halma vill. env. (plain), 12°22.9'N, 54°07.0' E, 34 m, 10.-11.xi.2010, 3 spec., P. Hlaváč leg. (2 NMPC, 1 ECRI); Noged plain, Abataro, 12°22.1'N, 54°03.4'E, 20 m, 12.-13.vi.2012, border of sand dunes and shrubland, 26 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (22 NMPC, 4 ECRI); Wadi Dineghen cave, 12°36.58'N, 54°03.48'E, 90 m, 6.vi.2012, 2 spec., V. Hula & J. Niedobová leg. (NMPC); Sheq vill. env., 12°39.7'N, 54°03.8'E, 15 m, 8.vi.2012, Croton socotranus and Jatropha unicostata shrubland, 8 spec., J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (6 NMPC, 1 ECRI); Berber spring, 9.x.2007, 1 spec., R. Sindaco leg. (MCCI); Di Lisha, 4.iv.2008, 4 spec., A. Carapezza leg. (ECRI); Hadibo, 9.iv.2008, 1 spec., A. Carapezza leg. (ECRI).

**Notes on lectotype designation.** To unequivocally fix the taxonomic status of this variable species, a lectotype of *Piazomias vermiculosus* Waterhouse, 1881 has been here designated. In the collections of the Natural History Museum, London are preserved the three examples listed above which fit the description. The female bearing a handwritten label identifying it as the 'type' (Fig. 104) and the length of which is 14.2 mm, was selected as the lectotype since

its vestiture is almost completely preserved (Fig. 103), whereas the two male paralectotypes have lost several of their scales. The aedeagus of a male paralectotype is illustrated in Figs 105 and 106.

Variability. A great deal of variation occurs in the width/length ratio of both pronotum and elytra, and in the size which ranges from 10.5 to 15.9 mm. In addition, the colour of vestiture varies from almost pure grey to quite uniformly pale brown, passing through greyish forms somewhat variegated with whitish and blackish, or more or less greenish patches. Smaller, greyish specimens are more common in lowland localities near the sand dunes, whereas the brownish larger ones with a longer and less strongly granular pronotum (like that of the types) are prevalent in the interior of the island. Several comparatively smaller and plumper light grey examples were collected at Abataro near the sand dunes of the south of the island, but intermediates with the larger and thinner form occur e.g. at Deiqub cave and along the western coast of Socotra.

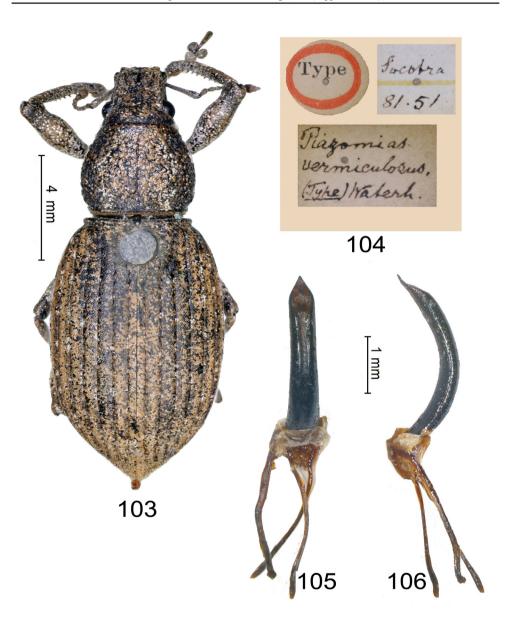
**Collection circumstances.** *Molybdotus vermiculosus* appears to be a common species from sea level up to at least 365 m. At some localities (e.g. Abataro), specimens of *M. vermiculosus* were frequently found on *Indigofera* spp. (Fabaceae) (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

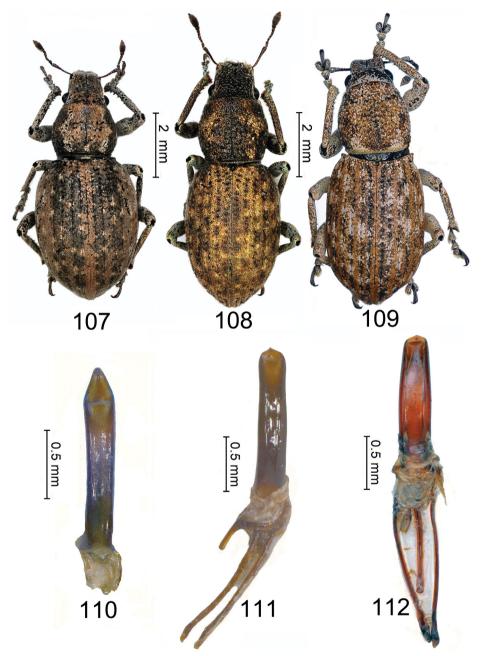
## Molybdotus minor sp. nov.

(Figs 107, 110)

Type material. HOLOTYPE: 3 (NMPC), 'Yemen, Soqotra Is. 2003 // 9.xii., Qalansiyah env. // Ditwah (lagoon), 23 m // N 12°41'42", E 53°30'08" // [GPS], David Král lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král'. Paratypes: 3 ♂♂ 1 ♀, same label data as holotype (3 NMPC, 1 ECRI); 2 ♂♂, 'Yemen, Soqotra Is.; 28.- // 29.xi.2003 // Homhil protected area // N 12°34′27″, E 54°18′32″ // 364 m [GPS]; Jan Farkač lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 ♀, 'Yemen, Soqotra Is. // Homhil protected area // 28-29/xi.2003, 364 m // N 12°34'27", E 54°18'32" // [GPS]; David Král lgt.', 'Yemen -Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 2 ♀ . 'Yemen, Soqotra Is.; 9.-10. xii.2003 // Qalansiyah env. // Khayrha mts., N slopes // N 12°38′50″, E 53°27′45″ // 85-592 m [GPS]; Jan Farkač lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (1 NMPC, 1 ECRI); 3 🖧 1 \, \text{ 'Yemen, Socotra Island // Aloove area, Hassan vill. env. // 12\, 31.2\, \text{ N, 54\, 07.4'E, 221 m // Jiří Hájek leg. 9-10. xi.2010' (NMPC); 1 %, 'Yemen, Soqotra Is., Wadi // Ayhaft, 24-26/.xi.2003, N 12°// 36'38" E 53°58'49", 190 m // [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 2 3/3, 'Yemen, Socotra Island, // wadi Ayhaft // 12°36.5'N, 53°58.9'E, 200 m // Jiří Hájek leg. 7-8.xi.2010' (1 NMPC, 1 ECRI); 1 &, 'Yemen, Socotra Island, // wadi Ayhaft // 12°36.5'N, 53°58.9'E, 200 m // J. Bezděk leg. 7–8.xi.2010' (NMPC); 1 %, 'Yemen, Socotra // wadi Ayhaft // 12°36.5'N, 53°58.9'E // 200 m, 7-8.xi,2010 // P. Hlaváč lgt.' (NMPC); 4 ♂♂ 2 ♀♀ paratypes, 'Socotra Is. (YE) wadi Ayhaft // 12°36.5′N, 53°58.9′E, 200 m // Jan Batelka leg. 7-8.xi.2010' (4 JBPC, 2 ECRI); 1 &, 'Yemen, Socotra Island E // Kesa env., 220-300 m // N 12°39'37", E 53°26'42" // 28-29.i.2010, L. Purchart lgt.' (NMPC); 1 ♀, 'Yemen, Soqotra Is., Gubbah // vill. env., 23.xi.2003, N 12°36′ // 35" E 53°46'56", 7 m [GPS] // leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 2 ♂♂ 3 ♀♀, 'Yemen, Soqotra Is., Homhil // protected area, 28-29/.xi.2003 // N 12°34'27" E 54°18'32", 364 // m [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (3 NMPC, 2 ECRI); 1 \, 'Yemen, Socotra Island // Noged plain, Abataro // border of sand dunes and //  $shrubland\ 12-13.vi.2012\ //\ 12^{\circ}22.1'N,\ 54^{\circ}03.4'E,\ 20\ m',\ `Socotra\ expedition\ 2012\ //\ J.\ Bezděk,\ J.\ Hájek,\ V.\ Hula,\ //\ Marchand Marchadol Marchand Marchand Marchand Marchand Marchand Marchadol Ma$ P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 1 🖒, 'Socotra (YE) // Qasroo // 31.X.2007 - R. Sindaco' (MCCI); 1 ♂ 1 ♀, 'Socotra (YE) // Dixam (Pres House) // 29.XII.2007 - R. Sindaco' (1 MCCI, 1 MUPI).



Figs 103–106. *Molybdotus vermiculosus* (Waterhouse, 1881). 103–104 – female lectotype (103 – habitus; 104 – labels borne by the same); 105–106 – male paralectotype (105 – aedeagus in dorsal view; 106 – the same in side view).



Figs 107–112. 107, 110 – *Molybdotus minor* sp. nov.: 107 – habitus of the holotype; 110 – aedeagus of a paratype in dorsal view. 108, 111 — *Molybdotus viridiaureus* sp. nov. 108 – habitus of the holotype; 111 – aedeagus of a paratype in dorsal view. 109, 112 – *Molybdotus mixtus* sp. nov., holotype. 109 – habitus; 112 – aedeagus in dorsal view.

**Description.** *Male holotype.* Body length 5.9 mm. Piceous, except for ferruginous antennae, apical comb of tibiae and tarsi, and claws. Dorsal surface very densely covered by recumbent subpolygonal strictly adpressed brownish, golden-brownish and whitish scales forming two vague lateral stripes on each side of pronotum and indistinct patches on elytra; in addition there are slightly erect elongate curved silvery scales, barely visible on pronotum and elytra, more so on head and rostrum. Ventral side with recumbent adpressed wide irregularly oval dirty yellowish and greyish scales; ventrites with numerous semierect silvery-whitish setae (Fig. 107).

Head. Rostrum 0.91 times as long as wide, sides slightly converging forward, apex of scrobes visible from above. Epifrons barely depressed, about as wide as interocular distance at base, dorsum with thin median sulcus continuing on space between eyes plus a wider lateral longitudinal groove, sides of rostrum quite abruptly sloping laterally. Epistome small, U-shaped, smooth, and with thin low keel posteriorly. Head large, space between eyes flat and sulcate, vertex moderately convex. Antennae slender; scape slightly bisinuous and gradually clubbed at apex; funicular antennomere I about one half longer and much wider than II, antennomeres III to VI moniliform, transverse and barely diminishing in length, antennomere VII subtrapezoidal, transverse and somewhat annexed to club, which is fusiform and as long as four preceding antennomeres. Eyes quite small, convex, little sunken.

*Pronotum* 0.75 times as long as wide, widest at middle, moderately convex dorsally, sides strongly rounded, apex slightly convex, base truncate, keeled and of about same width of apex; disc with deep irregular large punctures and with thin median longitudinal sulcus vanishing forward. Scutellum triangular and minutely scaled.

*Elytra* short oval, 1.31 times longer than wide, 1.58 times as wide as pronotum, maximum width at middle, barely convex on basal half, then regularly convex in profile towards apex, base almost straight and keeled, apical declivity acute. Striae sulciform, punctures on them almost invisible. Intervals flat and much wider than striae.

Legs moderately elongate; femora moderately clubbed, particularly posterior ones; protibiae slightly curved inwards at apical two thirds and here with some rasp-like granules at base of each of which is inserted ferruginous stiff thick seta, meso- and metatibiae almost straight and devoid of granules but with few stiff ferruginous setae; tarsi robust, tarsomere I little longer than II which is hardly wider than long, tarsomere III strongly bilobed and much wider than long, tarsomere IV projecting from third by almost twice length of III.

*Ventral side*. Metaventrite and abdominal ventrite I with very shallow common median depression.

**Variability.** Males are similar to the holotype, whereas females have elytra slightly more broadly oval and a little longer compared to prothorax than they are in males, less strongly curved tibiae, and convex ventrites. The colour of vestiture varies from almost uniform to golden-brownish with more or less evident colour pattern; one specimen is pale golden with some metallic greenish scales, seen in some other paratypes.

Male genitalia. Aedeagus as depicted in Fig. 110.

Body length 5.3-7.6 mm.

**Differential diagnosis.** The new species is rather similar to *M. viridiaureus* sp. nov., the description of which follows, but can easily be distinguished, apart from the differently shaped

aedeagus, by its shorter elytra, clearly much more elongate and more depressed rostrum, pronotum much narrower than elytra, and usually not metallic colour (Figs 107–108). See Figs 107 and 109, and the key below for differences from *M. mixtus* sp. nov.

**Etymology.** The species name, Latin adjective *minor* (-or, -us) meaning 'smaller', points to the small size of the new species.

**Distribution.** Endemic to Socotra Island.

### Molybdotus viridiaureus sp. nov.

(Figs 108, 111)

Type material. HOLOTYPE: & (NMPC), 'Yemen; Soqotra Is., 23.xi.2003 // Gubbah vill, env. // N 12°36′35″ E 53°46′56″ // 7 m [GPS]; Jan Farkač lgt.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král'. PARATYPES: 2 3 2 2 2, same label data as holotype (2 NMPC, 2 ECRI); 1 3 1 2, 'Yemen, Sogotra Is. // 24-26/. xi.2003 // Wadi Ayhaft, 190 m // N 12°36′38″ E 53°58′49″ // [GPS], David Král lgt.' (NMPC); 7 👌 4 🗣 9, 'Yemen, Sogotra Is. // Homhil protected area // 28-29/xi.2003, 364 m // N 12°34′27″, E 54°18′32″ // [GPS]; leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (8 NMPC, 3 ECRI); 2 🖧 1 🔾 'Yemen, Soqotra Is., Wadi // Ayhaft, 24-26/.xi.2003, N 12° // 36'38" E 53°58'49", 190 m // [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (NMPC); 1 ♂ 1 ♀, 'Yemen, Socotra Island // coastal road, shrubby area // ca 5 km W of Hadibo // 13.vi.2009, L. Purchart lgt.' (1 NMPC, 1 ECRI); 2 QQ, 'Yemen, Socotra Island // Firmihin, 400-500 m // N 12°28'27", E 54°0'54" // 22-25.vi.2009 // L. Purchart & J. Vybíral lgt.' (NMPC); 1 ♀, 'Yemen, Socotra Island E // Homhil area, 400-510 m // N 12°34′25″, E 54°18′53″ // 9-10.ii.2010 // L. Purchart & J. Vybíral lgt.' (NMPC); 1 &, 'Socotra (YE) // wadi Ayhaft // 27.X.2007 - R. Sindaco' (MCCI); 1 3, 'Socotra (YE) // wadi Egiya // 8.XI.2007 - R. Sindaco' (MUPI); 1 3, 'Yemen, Socotra Island // road between Airport and Hadiboh // 12°38′27″N 53°58′22″E, // 80 m, 2.vi.2012 // V. Hula & J. Niedobová leg.' (NMPC); 2 3/3, 'Yemen, Socotra Island // Dixam plateau, Wadi Zerig // pools, Juncus marsh; Dracaena // trees; cave 13-14.vi.2012 // 12°29.6'N, 53°59.5'E, 655 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 1 \, 'Yemen, Socotra Island // Wadi Zirik, 650-670 m // N 12°29'35", E 53°59′28" // 16.vi.2009, L. Purchart leg.' (NMPC); 1 3, 'Socotra (YE) // wadi Zirigh // 28.I.2008 - R. Sindaco' (MCCI); 1 ♂ 1 ♀, 'Socotra (YE) // Thar area // 14.II.2009 - R. Sindaco' (1 MCCI, 1 ECRI); 1♀, 'Socotra (YE) // Thar // 5.III.2008 - R. Sindaco' (MUPI).

**Description.** *Male holotype*. Body length 6.7 mm. Piceous, antennae and tarsomere III dark ferruginous. Dorsal surface very densely covered by recumbent subpolygonal strictly adpressed golden, golden-greenish and brownish scales forming two vague lateral stripes on each side of pronotum and spots on elytra; in addition there are slightly erect elongate curved silvery scales, barely visible on pronotum and elytra, more so on head and rostrum. Ventral side with recumbent, wide, partly embricate irregularly oval golden-greenish scales (Fig. 108).

Head. Rostrum 0.69 times as long as wide, sides slightly converging forward, apex of scrobes visible from above. Epifrons almost flat, about as wide as interocular distance, dorsum with sulcus continuing on space between eyes, sides gradually sloping laterally. Epistome V-shaped, smooth and keeled posteriorly. Head large, interocular space slightly convex and sulcate, vertex strongly convex. Antennae slender; scape slightly bisinuous and gradually clubbed at apex; funicular antennomere I about one half longer and slightly wider than II, antennomeres III to VI moniliform, short and slightly diminishing in length, antennomere VII subtrapezoidal, transverse and somewhat annexed to club, which is fusiform and as long as four preceding antennomeres. Eyes quite small, convex, little sunken.

*Pronotum* 0.87 times as long as wide, widest at middle, quite flat dorsally, sides rather strongly rounded, apex slightly convex, base truncate, weakly keeled and of about same

width of apex; disc with deep irregular large punctures and some small isolate smooth bare granules, and with trace of thin median longitudinal sulcus. Scutellum triangular and bare.

*Elytra* elongate oval, 1.51 times longer than wide, 1.33 times as wide as pronotum, maximum width at middle, rather flat on basal half, then moderately convex in profile towards apex, base straight and weakly keeled, apical declivity acute. Striae sulciform, punctures on them hidden by scaling. Intervals much wider than striae, slightly convex, narrowing posteriorly.

Legs as in M. minor sp. nov.

*Ventral side.* Metaventrite and abdominal ventrite I with very shallow common median depression.

**Variability.** Paratypes are very similar to the holotype. Females have elytra slightly longer, protibiae less curved inwards and lack abdominal impression. The colour varies a little from almost pure golden to golden-greenish.

Male genitalia. Aedeagus as depicted in Fig. 111.

Body length 6.3-7.7 mm.

**Differential diagnosis.** Small size, short elytra and general appearance approach *M. viridiaureus* sp. nov. to the preceding species from which it can be separated by its much shorter and not or hardly subdepressed rostrum, greater width of pronotum compared to that of elytra, rather elongate elytra and usually metallic colour (Figs 107–108). See below for differences from *M. mixtus* sp. nov. This species was illustrated by Wranik (2003: pl. 178, fig. f) as 'Curculionidae, not yet identified'.

**Etymology.** The species name, the composite Latin adjective *viridiaureus* (-*a*, -*um*), meaning 'green-golden', refers to the colour of dorsal scales of the new species.

**Distribution.** Endemic to Socotra Island.

## Molybdotus mixtus sp. nov.

(Figs 109, 112)

Type material. Holotype: ♂ (MCCI), 'Socotra (YE) // Berber spring // 8.X.2007 - R. Sindaco'. Paratypes: 2 ♀♀, same label data as holotype (1 MUPI, 1 ECRI).

**Description.** *Male holotype*. Body length 7.3 mm. Piceous, antennae dark brown. Dorsal surface covered by recumbent subpolygonal adpressed yellowish, golden-brown, brownish and white scales forming two irregular lateral stripes on each side of pronotum and whitish rather large irregular patches on elytra, and by barely visible slightly erect elongate curved silvery scales. Ventral side with wide recumbent partly embricate irregularly oval white scales intermingled with few brownish ones in form of dots (Fig. 109).

*Head*. Rostrum 0.82 times as long as wide, sides subparallel, extreme apex of scrobes visible from above. Epifrons slightly concave, hardly wider than interocular distance, dorsum with thin sulcus continuing on space between eyes, sides abruptly sloping laterally. Epistome V-shaped, smooth and weakly keeled posteriorly. Head large, interocular space slightly convex and sulcate. Antennae slender; scape almost straight, scaled and gradually clubbed at apex; funiculus almost as that of *M. viridiaureus* sp. nov. Eyes comparatively large, moderately convex, little sunken.

*Pronotum* as long as wide, widest at middle, quite flat dorsally, sides rather strongly rounded, apex and base slightly convex, base weakly keeled and barely wider than apex; disc

with deep irregular large punctures, and with barely visible trace of thin median longitudinal sulcus. Scutellum minute, roundish, sunken and scaled.

*Elytra* elongate oval, 1.44 times longer than wide, 1.38 times as wide as pronotum, maximum width at apical third, rather flat on basal half, then moderately convex in profile towards apex, base concave and weakly keeled, apical declivity acute. Striae sulciform, punctures on them hidden by scaling but larger and obvious in basal half. Intervals much wider than striae, almost flat, barely narrowing posteriorly.

Legs moderately robust; femora clubbed; protibiae slightly curved inwards at apical third and, starting from basal third, with some rasp-like granules at base of each of which is inserted a honey-red stiff thick seta, meso- and metatibiae almost straight and with fewer minute granules; inner margin of all tibiae in addition with long silvery semierect setae; tarsi as in preceding species.

*Ventral side.* Metaventrite and abdominal ventrite I with very shallow common median depression.

Male genitalia. Aedeagus as depicted in Fig. 112.

**Variability.** Females are almost identical to the holotype, the colour of both specimens is just a little less contrasting, and their abdomen is barely convex instead of very weakly impressed. *Body length* 7.3–7.7 mm.

**Differential diagnosis.** Small species combining some characters of the two preceding ones. The body shape of *M. mixtus* sp. nov. resembles that of *M. viridiaureus* sp. nov. but, apart from the different aedeagus, the colour pattern of *M. mixtus* is quite diverse, its legs are shorter, and the rostrum is much more elongate and keeled on sides. On the contrary, the rather similarly scaled *M. minor* sp. nov. has even longer rostrum, obviously shorter pronotum and plumper ovate elytra, so that it is impossible to confuse it with *M. mixtus* sp. nov. (Figs 107–109).

**Etymology.** This species is somewhat intermediate between the preceding two ones, and its name, Latin adjective *mixtus* (-a, -um) meaning 'mixed, blend', refers to this fact.

Distribution. Endemic to Socotra Island.

### Identification key to Socotran Molybdotus

1	Size above 10 mm
_	Size below 8 mm.
2	Rostrum elongate, just little shorter than wide and depressed in middle. Vestiture usually
	mottled with brownish and whitish scales.
_	Rostrum short, much wider than long and flat or convex in middle. Vestiture usually
	metallic golden and greenish. Elytra elongate and little wider than pronotum. Eyes smal
	and somewhat subconical
3	Elytra shortly oval and much wider than clearly transverse pronotum (Fig. 107). Rostrun
	almost as long as wide and slightly tapering forward. Sides of pronotum darker than mo
	derately convex disc
_	Elytra elongate-oval and moderately wider than quite elongate pronotum (Fig. 109)
	Rostrum clearly transverse and not tapering forward. Sides of pronotum paler than almost
	flat disc. M. mixtus sp. nov

### Subfamily Lixinae Tribe Cleonini

### Temnorhinus (Temnorhinus) seductus Faust, 1904

Temnorhinus seductus Faust, 1904: Perrin (2000: 425).

**Distribution.** Djibouti (Faust 1904), Socotra (Perrin 2000).

#### Tribe Lixini

### Hypolixus pica (Fabricius, 1798)

Lixus (Paralixus) nubilosus Boheman, 1836: Perrin (2000: 435).

**Material examined** (4 spec.). **YEMEN: SOCOTRA ISLAND:** Lahas, 12.646N 54.091E, 69 m, 17.xi.2000, 1 spec., B. Pražan leg. (NMPC); Noged plain, wadi Ireeh, 12°23′11″N 53°59′47″E, 95 m, 6.–7.xi.2003, 1 spec., D. Král leg. (NMPC); Hadiboh env., 12°65′02″N 54°02′04″E, 10–100 m, 21.xi-12.xii.2003, 1 spec., J. Farkač leg. (NMPC); Wadi Hayhaft, 12°36.5′N 53°58.9′E, 200 m, 7.–8.xi.2010, 1 spec., P. Hlaváč leg. (NMPC).

**Notes.** A widespread species associated primarily with *Tamarix* spp. (Magnano et al. 2009). **Distribution.** Cyprus, Jordan, Syria, Iraq, United Arab Emirates, Egypt, Sudan, Djibouti, Socotra, Ethiopia, Chad, Niger, Senegal, Togo, Congo (Voss 1962c, Magnano et al. 2009).

# Subfamily Molytinae Tribe Ithyporini

#### Endeochetus Kolbe, 1898

**Notes.** There are only five described species of *Endeochetus* in mainland Africa, since Marshall (1951) moved some taxa described as *Endeochetus* by Hustache (1932, 1937), namely *E. conversus* Hustache, 1932, *E. griseolus* Hustache, 1937 and *E. minutus* Hustache, 1937, to *Diaphna* Pascoe, 1870 on the base of their deep prosternal channel. Perrin (2000), while describing the Socotran *E. canui* Perrin, 2000, still considered *D. minuta* (Hustache, 1937) as an *Endeochetus*, probably unaware of the paper by Marshall (1951). This genus is well represented in Socotra, given that ten new species are described in this paper, which brings the number of named *Endeochetus* living in the island to eleven, higher than that of those occurring outside this archipelago.

#### Endeochetus canui Perrin, 2000

(Fig. 113)

Endeochetus canui Perrin, 2000: 423; Wranik (2003): 362.

**Material examined** (77 spec.). **YEMEN: SOCOTRA ISLAND:** Wadi Ayhaft, 12°36′38″N 53°58′49″E, 190 m, 24.-26. xi.2003, 10 spec., D. Král leg. (NMPC); Wadi Hayhaft, 12°36.5′N 53°58.9′E, 200 m, 7.–8.xi.2010, 45 spec., P. Hlaváč leg. (34 NMPC, 2 BMNH, 9 ECRI); same data, 18 spec., J. Batelka leg. (14 JBPC, 4 ECRI); Qalansiyah env., Ditwah (lagoon), 12°41′42″N 53°30′08″E, 23 m, 9.xii.2003, 2 spec., D. Král leg. (NMPC); Berber spring, 9.x.2007, 2 spec., R. Sindaco leg. (MCCI).

**Collection circumstances.** Collected under bark of *Euphorbia* trees (Perrin 2000). Specimens from wadi Ayhaft were collected at night on *Euphorbia arbuscula* Balf. f. (Euphorbiaceae) (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

### Endeochetus crassirostris sp. nov.

(Figs 114, 116)

Type material. HOLOTYPE: & (NMPC), 'Yemen; Soqotra Is., 23.xi.2003 // Gubbah vill. env. // N 12°36′35″N, E53°46′56″ // 7 m [GPS]; Jan Farkač leg.', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král'. Paratypes: 1 &, 'Yemen, Socotra isl., Dikseheten. // 5.iv.2001, leg. V. Bejček & K. Šťastný' (NMPC); 2 &&, 'Yemen, Socotra Isl., // Momi-Homhil, // 2.vi.2010, V. Hula & J. Niedobová leg.' (1 NMPC, 1 ECRI); 1 &, 'Socotra: Homhil // 23-24.II.2009 - leg. P. // Lo Cascio & F. Grita' (PLFG); 1 &, 'Socotra (YE) // wadi Ayhaft // 27.X.2007 - R. Sindaco' (MCCI).

**Description.** *Male holotype*. Body length 9.0 mm. Piceous, opaque, strongly punctured; antennae and legs brown and moderately shining. Dorsal vestiture of sparse ochreous and yellowish hair-like and comma-like half-recumbent scales, some erect ones are at base of rostrum; in addition at basal third of elytral intervals IV and VI there are oval to lanceolate, finely sulcate, almost recumbent embricate yellow scales also visible on intervals II to VI on apical third and forming an inconspicuous pattern. Basal 3/4 of femora and internal margin of tibiae with long erect silvery or golden setae. Ventral side rather densely punctured, and clothed with fairly sparse yellowish short scales originating from punctures; pro- and mesocoxae, and middle of ventrites with long suberect golden hair-like setae (Fig. 114).

Head. Rostrum stout, 0.80 times as long as pronotum, almost straight from base to antennal insertion, here quite abruptly curved and slightly tapering towards apex in lateral view, its coarse punctures becoming strigose already little basad of antennal insertion, from here to apical sixth with five smooth longitudinal carinae separated by deep sulci, two lateral keels continuing up to very near epistome, middle one ending midway from antennae and epistome, anteriad of its ending surface is densely punctured; in dorsal view rostrum subparallel sided at basal quarter, then slightly dilated up to antennal insertion where it suddenly narrows, then is moderately widening towards apex. Antennae inserted apicad of middle of rostrum; scape strongly curved inwards at extreme base, then bisinuous and gradually clubbed; funicular antennomere I thicker than following ones and slightly longer than II; antennomeres III to VII progressively shorter, last clearly transverse and annexed to club which is subconical and about as long as two preceding antennomeres. Head convex, punctured, space between eyes as wide as half of rostral width at base; eyes subtriangular and not protruding from head convexity.

*Pronotum* 1.08 times longer than wide, faintly constricted near truncate apex, base slightly convex, disc rather flat, with median furrow and with large coarse round punctures from each of which starts erect yellow seta; sides rounded, maximum width at middle. Scutellum almost invisible.

*Elytra* 1.29 times longer than wide and 1.88 times as long as pronotum, dorsum depressed on basal half between intervals I–III, then moderately convex towards apex, sides moderately curved at basal 2/3 then quite strongly curved towards apex, maximum width little beyond middle. Striae formed by very large elongate punctures from which originates an almost

recumbent brownish long seta. Interstriae ill-defined and very irregular, III, V and VII more convex than others and irregularly punctate.

Legs fairly stout; femora strongly clubbed and acutely toothed, densely punctured and with yellowish middle ring of scales; tibiae compressed, curved at extreme base then almost straight, punctured, outer margin keeled, inner one widened basally, more so on protibiae which are in addition serrate at basal quarter; tarsi narrow, tarsomere III not bilobed.

*Ventral side*. Tubercles on basal margin of prosternum posterior to coxae large, moderately protruding and with rounded apex; abdominal ventrites I and II with large rather deep common impression.

Variability. Paratypes are very similar to the holotype.

Male genitalia. Aedeagus as depicted in Fig. 116.

Body length 8.9-9.7 mm.

**Differential diagnosis.** *Endeochetus crassirostris* sp. nov. is a large-sized stout species similar to *E. helenae* sp. nov. and to *E. saccofrancisci* sp. nov., from both of which it readily differs already by its sulcate pronotum.

**Etymology.** The species name, the composite Latin adjective *crassirostris* (-*is*, -*e*), meaning 'with a broad rostrum', refers to the thick and short rostrum of the new species.

**Distribution.** Endemic to Socotra Island.

### Endeochetus helenae sp. nov.

(Figs 115, 117)

Type material. HOLOTYPE: ♂ (MCCI), 'Socotra (YE) // Dohor village // 9.II.2009 - R. Sindaco'. PARATYPE: 1 ♂, same label data as holotype (MUPI).

**Description.** *Male holotype*. Body length 7.2 mm. Piceous, opaque, strongly punctured. Dorsal vestiture on rostrum formed by barely visible rather sparse golden-brownish half-recumbent small hair-like scales; head bare; pronotum with sparse almost recumbent very elongate curved yellowish scales originating from punctures; elytra with row of suberect similar scales on intervals, which bear also large sulcate roundish scales forming pattern of Fig. 115; legs with sparse yellowish to silvery setae; basal two thirds of femora and internal margin of tibiae with long erect silvery or golden setae. Ventral side rather densely punctured and clothed with fairly sparse yellowish short scales originating from punctures; pro- and mesocoxae, and ventrites with long suberect golden hair-like setae (Fig. 115).

Head. Rostrum quite elongate, about as long as pronotum, rather regularly and strongly curved, quite coarsely punctured, punctures irregularly confluent on sides of thin unapparent keel of basal half, keel becoming more evident from beyond antennal insertion to distance from apex about same of rostral width, where surface is densely punctured; in dorsal view sides of rostrum subparallel from base to antennal insertion, and slightly concave on apical half because rostrum is slightly dilated towards apex. Antennae inserted at middle of rostrum; scape slightly curved inwards at extreme base, then almost straight and gradually clubbed; funicular antennomere I not thicker than following ones and clearly shorter than II; antennomeres III to VII progressively little shorter, last moderately transverse and annexed to club which is subconical and slightly longer than two preceding antennomeres. Head convex,

minutely punctured, space between eyes as wide as hardly more than half of rostral width at base; eyes subtriangular and not protruding from head convexity.

*Pronotum* 0.93 times broader than long, slightly constricted near truncate apex, base slightly convex, disc moderately convex, without median furrow and with large coarse round punctures from each of which starts erect yellow elongate scale; sides only slightly rounded on basal half, more so on apical one, maximum width imperceptibly apicad of middle. Scutellum invisible.

*Elytra* 1.42 times longer than wide and 2.23 times as long as pronotum, dorsum depressed on basal half between intervals I–III, then moderately convex towards apex, base little concave, sides moderately curved at basal two thirds then quite strongly curved towards apex, maximum width at apical third. Striae formed by very large subquadrate punctures from which originates an almost recumbent yellowish elongate scale. Interstriae convex and punctate, III, V and VII more convex than others, all not wider than striae.

Legs moderately elongate; femora strongly clubbed and acutely toothed, fairly densely punctured; tibiae compressed, curved at extreme base then almost straight, punctured, outer margin keeled, inner one with submedian obtuse tooth, larger on protibiae, all tibiae moderately serrate on apical half; tarsi rather narrow, tarsomere III not bilobed.

*Ventral side.* Tubercles on basal margin of prosternum posteriorly to coxae large and moderately protruding; metaventrite and abdominal ventrites I and II with large moderately deep common impression.

Male genitalia. Aedeagus as depicted in Fig. 117.

**Variability.** The other male is very similar to the holotype, its vestiture is partly abraded and the elytral markings are less visible, and body length 5.6 mm.

**Differential diagnosis.** This new species very much resembles *E. saccofrancisci* sp. nov., from which can be differentiated particularly by the structure of its antennae, since in *E. helenae* sp. nov. funicular antennomere I is clearly shorter than the second and the seventh is much longer than the sixth, whereas in *E. saccofrancisci* sp. nov. the first two antennomeres are subequal and the seventh is extremely transverse and about as long as the sixth. The dorsal pattern of both species is also slightly different (Figs 115 and 118). The third large broad-shaped Socotran *E. crassirostris* sp. nov. has sulcate pronotum and cannot be confused with *E. helenae* sp. nov. (Figs 114–115).

**Etymology.** The new species is named in honour of Hélène Perrin (MNHN, Paris), who significantly improved our knowledge of the Socotran weevils, and described the first species of *Endeochetus* from this island.

**Distribution.** Endemic to Socotra Island.

### Endeochetus saccofrancisci sp. nov.

(Figs 118, 121)

Type material. Holotype: ♂ (NMPC), 'Yemen, Socotra Island // Diksam plateau, 850-920 m // N 12°31′24″, E 53°58′29″ // 5.ii.2010 // L. Purchart & J. Vybíral lgt.'. Paratypes: 1 ♀, 'Yemen, Socotra // Al Haghier Mts. [sifting] // Scant Mt. env. 1450 m // 12°34.6′N, 54°01.5′E // 12-13.x.2010, P. Hlaváč' (NMPC); 1 ♀, 'Yemen, Soqotra Is., Hadiboh // env., 21.xi-12.xii.2003, N 12° // 35′02″ E 54°02.04′, ca. 10- // 100 m [GPS], leg. P. Kabátek', 'Yemen - Soqotra 2003 // Expedition; Jan Farkač, // Petr Kabátek & David Král' (ECRI); 1♀, 'Yemen, Socotra Island // Dixam plateau 14-15.vi.2012 // Firmihin, *Dracaena* woodland // 12°28.6′N, 54°01.1′E, 490 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype*. Body length 7.4 mm. Piceous, opaque, strongly punctured, antennal funiculus and tarsi dark brown. Dorsal vestiture on rostrum of barely visible rather sparse golden-brownish slightly erect small hair-like scales; head bare; pronotum with sparse semierect elongate curved yellowish scales originating from punctures and with recumbent large slightly concave embricate scales arranged in short line in front of scutellum and in two lateral confuse spots; elytra with irregular row of suberect yellow relatively short scales on intervals, which bear also large sulcate roundish scales forming pattern of Fig. 118; legs with sparse yellowish to silvery setae; basal two thirds of femora and internal margin of tibiae with few long erect silvery or golden setae. Ventral side with sparse recumbent yellow scales except for prosternum apicad of procoxae where scales form somewhat transverse stripe, and with erect hair-like golden ones particularly on abdomen (Fig. 118).

Head. Rostrum about as long as pronotum, rather regularly and strongly curved, little thicker on basal half than on apical one, quite coarsely punctured, convex along midline but not keeled although faint trace of carina is visible between antennal insertion; in dorsal view sides of rostrum subparallel from base to antennal insertion where rostrum narrows little, then its sides are slightly concave on apical half because rostrum widens little towards apex. Antennae inserted at middle of rostrum; scape barely curved inwards at extreme base, then almost straight and gradually clubbed; funicular antennomere I not thicker than following ones and about as long as II; antennomeres III to VII progressively slightly shorter, last clearly transverse and annexed to club which is subconical and about as long as two preceding antennomeres. Head convex, coarsely punctured, space between eyes as wide as slightly more than half of rostral width at base; eyes subtriangular and not protruding from head convexity.

*Pronotum* 1.03 times longer than wide, almost not constricted near a little convex apex, base feebly bisinuous, disc moderately convex, without median furrow and with large coarse round punctures from each of which starts erect yellow elongate scale; sides rather uniformly rounded, maximum width about at middle. Scutellum invisible.

Elytra 1.48 times longer than wide and 1.81 times as long as pronotum, dorsum depressed on basal half between intervals I–III, then moderately convex towards apex, base moderately concave, sides almost straight on basal half, then quite strongly curved and next moderately curved towards apex, maximum width at middle. Striae formed by very large subquadrate punctures. Interstriae convex and punctate, III, V and VII more convex than others, all not wider than striae.

Legs moderately elongate; femora strongly clubbed and acutely toothed, fairly densely punctured; tibiae compressed, curved at extreme base then almost straight, punctured, outer margin keeled, inner one with very obtuse tooth at basal third, larger on protibiae, all tibiae moderately serrate on apical half, protibiae more so; tarsi rather robust, tarsomere III not bilobed.

*Ventral side* very strongly and coarsely punctured; tubercles on basal margin of prosternum wanting; metaventrite and abdominal ventrites I and II with moderately deep large common depression.

Male genitalia. Aedeagus as depicted in Fig. 121.

Variability. Females are almost identical to the holotype, apart from their rostrum slightly thinner on apical half, and their convex abdomen.

Body length 7.1-7.4 mm.

**Differential diagnosis.** See above for differences from the close *E. helenae* sp. nov. and *E. crassirostris* sp. nov. Very probably this is the species illustrated by Wranik (2003: pl. 178, fig. b) as '*Endeochetus* sp.'

**Etymology.** The new species is named after my good friend Francesco Sacco, who was so kind to take fine pictures of most of the species here described, pictures which notably improved the quality of this paper.

**Distribution.** Endemic to Socotra Island.

#### Endeochetus pressicornis sp. nov.

(Figs 119, 122)

Type series. Holotype: & (NMPC), 'Yemen, Socotra Island // Firmihin, 400-500 m // N 12°28′27″, E 54°0′54″ // 22–25.vi.2009 // L. Purchart & J. Vybíral lgt.' Paratypes: 5 & \$\frac{1}{2}\text{, same label data as holotype (3 NMPC, 2 ECRI); 1 & Yemen, Socotra Island // Wadi Zirik, 650-670 m // N 12°29′35″, E 53°59′28″ // 16.vi.2009 // L. Purchart lgt.', (NMPC); 3 & \$\frac{1}{2}\text{, 'Yemen, Socotra Island // Dixam plateau 14-15.vi.2012 // Firmihin, \$Dracaena\$ woodland // 12°28.6′N, 54°01.1′E, 490 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (2 NMPC, 1 ECRI); 1 \$\frac{1}{2}\text{, 'Yemen, Socotra Island E // Homhil area, 400-510 m // N 12°34′25″, E 54°18′53″ // 9-10.ii.2010 // L. Purchart & J. Vybíral lgt.' (ECRI); 2 \$\frac{1}{2}\text{, 'Yemen, Socotra Island // Dixam plateau, Wadi Zerig // pools, \$Juncus marsh; \$Dracaena // trees; cave 13-14.vi.2012 // 12°29.6′N, 53°59.5′E, 655 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (2 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length 7.4 mm. Dark brown, moderately shining, rather coarsely punctured, rostrum, legs (extreme apex of femora and tarsi excepted) dark ferruginous. Dorsal vestiture on rostrum composed of sparse brownish half-recumbent minute hair-like scales; head almost bare; pronotum with curved slightly erect brownish small hair-like scales starting from centre of punctures and poorly visible; elytral intervals with 1–2 rows of suberect longer golden scales; legs with sparse hardly raised golden setae; femora basad of tooth, and internal margin of tibiae apicad of dilatation with long erect silvery or golden setae. Ventral side very densely and coarsely punctured with fairly dense suberect golden setae (Fig. 119).

Head. Rostrum 0.78 as long as pronotum, strongly curved at antennal insertion, moderately densely punctured, basal half with low smooth carina, at antennal insertion rostrum is dilated, and weakly longitudinally strigose on its sides beyond this point up to distance from apex about same of rostral width where surface is densely punctured; in dorsal view rostrum is slightly dilated apicad of basal 3/4, then its sides concave up to near apex where rostrum slightly dilated again. Antennae inserted just basad of middle of rostrum; scape slightly compressed, almost straight and gradually but rather strongly clubbed; funicular antennomere I strongly compressed on basal half, not thicker than following antennomeres and one and half times as long as II; antennomeres II to VII strongly compressed, strongly transverse and progressively widening towards small club which is not distinct from funiculus and is only slightly longer than funicular antennomere VII. Head subglobular, minutely punctured, space between eyes as wide as little more than half of rostral width at base; eyes subtriangular and flat.

*Pronotum* 1.62 times as long as broad, scarcely constricted near truncate apex, base barely convex, disc flat on apical half and depressed in front of scutellar area, with large coarse round

punctures; sides rounded, maximum width at middle. Scutellum invisible.

*Elytra* 1.81 times longer than wide and 1.81 times as long as pronotum, dorsum flat on basal 3/4, then moderately convex on apical declivity, base moderately concave, sides very slightly curved on basal two thirds, then moderately converging towards apex, maximum width at apical third. Striae formed by large subquadrate punctures from which originates an almost recumbent golden hair-like scale. Interstriae quite flat, not wider than striae and with row of roundish punctures.

Legs robust; femora slightly compressed, strongly clubbed and with large acute tooth, densely and coarsely punctured; tibiae compressed, slightly curved at extreme base, then almost straight, punctured, outer margin weakly keeled, inner one dilated in form of large tooth just basad of middle, concave and serrate apicad of widening; tarsi rather narrow, tarsomere III small and not bilobed.

*Ventral side.* Tubercles on basal margin of prosternum posteriorly to coxae quite strong; metaventrite and abdominal ventrites I and II with large shallow common impression. Habitus as in Fig. 96.

**Variability.** Males are very similar to the holotype, whereas females differ from males just by their rostrum slightly longer and their lack of abdominal depressions. The density of punctures particularly on elytral intervals is also a little variable.

Male genitalia. Aedeagus as depicted in Fig. 122.

Body length 6.2-7.5 mm.

**Differential diagnosis.** This new species is rather similar to *E. rugulipennis* sp. nov. from which it readily differs, as well as from all the known *Endeochetus*, by its strongly compressed antennae.

**Etymology.** The flattened antennal funiculus gives the name to the new species, the composite Latin adjective *pressicornis* (-is, -e) meaning 'with compressed antennae'.

**Distribution.** Endemic to Socotra Island.

### Endeochetus sp. 1 near pressicornis sp. nov.

Material examined (1 spec.). YEMEN: SOCOTRA ISLAND: Hagher Mts., Scand Mt. env., 12°34.6′N 54°01.5′E, 1450 m, 16.–18.vi.2012, montane evergreen woodland, 1 ♀, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg. (NMPC).

**Notes.** This single female differs from the very similar ones of *E. pressicornis* sp. nov. by the very dense and coarser minute punctures on all dorsal surface. Very probably another new species, not described here for lack of sufficient material, and particularly of the male. Body length 8.0 mm.

### Endeochetus maculifer sp. nov.

(Figs 120, 123)

Type series. Holotype:  $\circlearrowleft$  (NMPC), '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'. PARATYPES: 1  $\circlearrowleft$ , same label data as holotype (NMPC); 2  $\circlearrowleft$   $\circlearrowleft$  3  $\circlearrowleft$   $\circlearrowleft$ , 'Yemen, Socotra Island // Al Haghier Mts. // Scant Mt. env., 1450 m // 12°34.6′N, 54°01.5′E // L. Purchart leg. 12-13.xi.2010' (4 NMPC, 1 ECRI); 3  $\circlearrowleft$   $\circlearrowleft$  'Yemen, Socotra island // Hagher Mts., Skant, // N 12°34.557′ E 54°01.514′ // V. Hula & J. Niedobová leg. // 7.-8.vi.2010' (2 NMPC, 1 ECRI); 1  $\circlearrowleft$ , 'Socotra Is (YE) // Al Haghier Mts. Scant

Mt. env. // 12°34.6′N, 54°01.5′E, 1450 m // Jan Batelka leg. 12-13.xi.2010' (JBPC); 2 ♂♂ 4 ♀♀, 'Yemen, Socotra // Al Haghier Mts. [sifting] // Scant Mt. env. 1450 m // 12°34.6′N, 54°01.5′E / 12-13.xi.2010, P. Hlaváč' (4 NMPC, 2 ECRI); 3 ♀♀, 'Yemen, Socotra Island // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16-18. vi.2012 // 12°34.6′N E 54°01.5′E, 1450 m², 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (2 NMPC, 1 ECRI).

**Additional material examined.** 'Yemen, Socotra Island // Zemhon area, 270-300m // N. 12°20'58", E 54°06'39" // 16-17.vi.2010 // V. Hula leg.', 1  $\cite{1}$  (NMPC); 'Yemen, Socotra Island W // N 12°39'37", E 53°26'42" // 240-300 m a.s.l. // 15.vi.2009, L. Purchart leg.', 1  $\cite{1}$  (NMPC).

**Description.** *Male holotype*. Body length 6.1 mm. Dark brown, moderately shining, rather coarsely punctured, rostrum, legs (tarsi, apex of femora and of tibiae excepted), anterior third of pronotum, base and apical declivity of elytra and suture ferruginous. Dorsal vestiture on rostrum composed of rather sparse half-recumbent golden-brownish small hair-like scales; head bare; pronotum with sparse almost recumbent elongate curved brownish hair-like scales; elytra with row of similar suberect slightly longer scales on intervals; sulcate subtriangular and oval yellow recumbent scales form pattern of Fig. 120; legs with sparse golden setae; basal two thirds of femora and internal margin of tibiae apicad of dilatation with long erect silvery or golden setae. Ventral side very densely and coarsely punctured with fairly sparse rather short suberect golden setae (Fig. 120).

Head. Rostrum as long as pronotum, rather regularly and strongly curved, very coarsely punctured, basal half tricarinate, both lateral carinae converging towards base, punctures irregularly confluent on sides of thin keel of basal half, just basad of antennal insertion rostrum becomes 5-keeled up to distance from apex about same of rostral width, where surface densely punctured as it is between carinae; in dorsal view rostrum slightly dilated apicad of basal fifth, then subparallel up to near apex, and here slightly dilated again. Antennae inserted at middle of rostrum; scape almost straight and gradually clubbed; funicular antennomere I barely thicker than following ones and little longer than II; antennomeres III to VII progressively slightly shorter, last moderately transverse and annexed to club which is subconical and is as long as two preceding antennomeres. Head convex, minutely punctured, space between eyes as wide as little more than half of rostral width at base; eyes subtriangular, flat and imperceptibly sunken.

*Pronotum* 1.07 times as long as broad, slightly constricted near truncate apex, base barely convex, disc flat on apical half and depressed in front of scutellar area, with large coarse round punctures intervals of which in part form irregular ridges; sides moderately rounded, maximum width at middle. Scutellum invisible.

*Elytra* 1.62 times longer than wide and twice as long as pronotum, dorsum flat on basal two thirds, then quite strongly convex on apical declivity, base slightly concave, sides only slightly curved on basal two thirds then moderately converging towards apex, maximum width at apical third. Striae formed by large subquadrate punctures from which originates an almost recumbent golden unapparent seta. Interstriae not wider than striae, rugosely and irregularly punctured, little convex, III, V and VII little more so than others.

Legs moderately elongate; femora strongly clubbed and acutely toothed, densely and coarsely punctured; tibiae compressed, curved at extreme base then almost straight, punctured, outer margin keeled, inner one dilated at basal third, concave and strongly serrate apicad of widening; tarsi rather narrow, tarsomere III not bilobed.

*Ventral side*. Tubercles on basal margin of prosternum posteriorly to coxae barely visible; metaventrite and abdominal ventrites I and II with large shallow common impression.

Variability. The colour of the integument may be more or less dark, and a moderate variability can be observed in the disposition of pronotal and elytral yellow markings. Females differ from males by their longer rostrum more dilated on basal half and here with five thin keels, whereas apicad of the antennal insertion their rostrum narrows and is not clearly keeled, and then towards apex it widens again so that its sides are a little concave. Tibiae of females are a little less serrate and their setae are less numerous and slightly erect; in addition female ventrites are not impressed.

Male genitalia. Aedeagus as depicted in Fig. 123.

Body length 4.6-6.1 mm.

**Differential diagnosis.** Among the Socotran *Endeochetus* this new species is rather similar to *E. rugulithorax* sp. nov., being however easy to separate from it already by the densely and coarsely instead of rugosely punctured pronotum, the large subquadrate instead of small roundish punctures of elytral striae, the uneven instead of regularly punctured interstriae, and the interstriae III, V and VII more convex instead of as convex as the remaining ones.

**Etymology.** The yellow elytral patches on elytra suggested its name, Latin adjective *maculifer* (-a, -um), meaning 'bearing spots'.

**Collection circumstances.** This species was sifted from leaf litter in montane evergreen woodland in the highest parts of the Hagher mountains (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

# Endeochetus rugulithorax sp. nov.

(Figs 124, 125, 127)

Type material. Holotype:  $\circlearrowleft$  (MCCI), 'Socotra (YE) // wadi Ayhaft // 30.X.2007 - R. Sindaco'. Paratypes:  $1 \circlearrowleft 2 \circlearrowleft 2 \circlearrowleft 2$ , same label data as holotype (1 MCCI, 1 MUPI, 1 ECRI);  $2 \circlearrowleft 2 \circlearrowleft 3$ , 'Socotra (YE) // wadi Ayhaft // 27.X.2007 - R. Sindaco' (1 MCCI, 1 ECRI);  $1 \circlearrowleft 3$ , 'Socotra (YE) // Steroh // 10.II.2008 - R. Sindaco' (ECRI);  $1 \circlearrowleft 3$ , 'Socotra (YE) // wadi Thruba // 2.III.2008 - R. Sindaco' (MCCI);  $2 \circlearrowleft 3$ , 'Socotra (YE) // Berber spring // 8.X.2007 - R. Sindaco' (1 MCCI, 1 ECRI);  $1 \circlearrowleft 3$ , 'Socotra (YE) // Thar // 5.III.2008 - R. Sindaco' (MUPI);  $1 \circlearrowleft 3$ , 'Socotra (YE) // Dixam // 28.I.2008 - R. Sindaco' (MCCI).

**Description.** *Male holotype*. Body length 4.7 mm. Brown, little shining, coarsely punctured, rostrum and legs dark ferruginous. Dorsal vestiture on rostrum composed of rather sparse golden-brownish slightly erect hair-like scales; head minutely squamose; pronotum with sparse slightly erect elongate curved yellowish hair-like scales originating from punctures; elytra with a row of similar almost recumbent longer scales on intervals; striae with lanceolate long barely erect scales starting from punctures; legs with sparse golden setae; basal 3/4 of femora and internal margin of tibiae apicad of tooth with very long erect silvery setae. Ventral side very densely and coarsely punctured with fairly sparse yellowish semierect golden setae more evident on abdomen (Figs 124–125).

Head. Rostrum 0.82 times as long as pronotum, rather strongly curved, more so at antennal insertion, with moderately dense punctures, basal half tricarinate, both lateral carinae converging towards base, punctures coarse on sides of central keel, beyond antennae 5-keeled up to distance from apex less than rostral width, and here surface relatively sparsely punctured;

in dorsal view rostrum dilated apicad of basal quarter, then its sides barely converging up to antennal insertion, and beyond this point they are slightly concave up to near apex where rostrum slightly dilated again; obliquely seen rostrum angularly dilated basad of antennal insertion. Antennae inserted at middle of rostrum; scape short, slightly curved and gradually clubbed; funicular antennomere I barely thicker than following ones and a little longer than II; antennomeres II to VII short and progressively diminishing in length, VII excepted, since this last is moderately transverse and annexed to club which is subconical and slightly shorter than two preceding antennomeres. Head convex, minutely punctured, space between eyes as wide as half of rostral width at base; eyes subtriangular, flat and slightly sunken.

*Pronotum* 1.09 times as long as broad, little constricted near slightly convex apex, base hardly bisinuous, disc barely convex and faintly depressed in front of scutellum, with large dense roundish punctures intervals of which are in part confluent in form of smooth shining irregular oblique lines; sides moderately rounded, maximum width at middle. Scutellum elongate, barely visible.

*Elytra* 1.72 times longer than wide and 2.12 times as long as pronotum, dorsum flat on basal two thirds, then quite strongly convex on apical declivity, base little concave, sides only slightly curved at basal two thirds, then moderately converging towards apex, maximum width at apical third. Striae formed by large rectangular punctures from which originates an almost recumbent golden elongate scale. Interstriae almost flat, about as wide as striae, with fairly regularly row of round punctures.

*Legs* quite elongate; femora clubbed and acutely toothed, densely punctured; tibiae little compressed, curved at base and at apical fifth, punctured, outer margin with blunt keel, inner one toothed at basal third, concave and strongly serrate apicad of widening; tarsi narrow, tarsomere III not bilobed.

*Ventral side*. Tubercles on basal margin of prosternum posteriorly to coxae moderate and rather acutely protruding; abdominal ventrites I and II with large very shallow common impression.

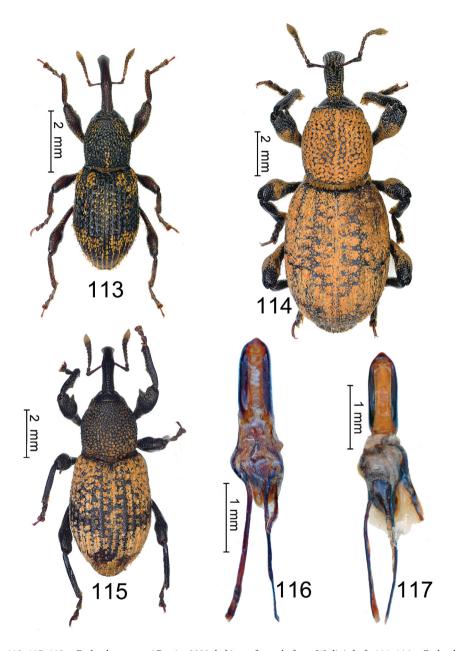
Variability. Other paratypes are very similar to the holotype. Some specimens have a trace of variable faint yellowish dorsal pattern formed by scales on strial punctures which are enlarged on striae III, VII and VIII at base, sometimes obliquely connected with stria V at middle, and forming a more or less visible transverse band at the beginning of apical declivity, plus sometimes another band at apex. The base of rostrum may be more or less clearly tricarinate. Females differ from males only by their ventrites flat instead of slightly impressed. Since all the specimens were collected using pitfall traps, some of them lack part of appendages.

Male genitalia. Aedeagus as depicted in Fig. 127.

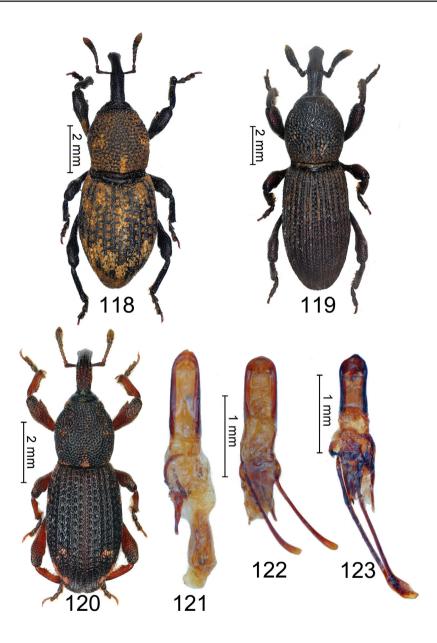
Body length 4.7-5.7 mm.

**Differential diagnosis.** For differences from the similar *E. maculifer* sp. nov. see above. **Etymology.** The name of the new species is a noun in apposition, composed from the Latin adjective *rugulosus* (meaning rugulose, having little wrinkles) and the Latin noun *thorax* (meaning chest, bosom, breast), given after the very elongate longitudinal punctures on its pronotum.

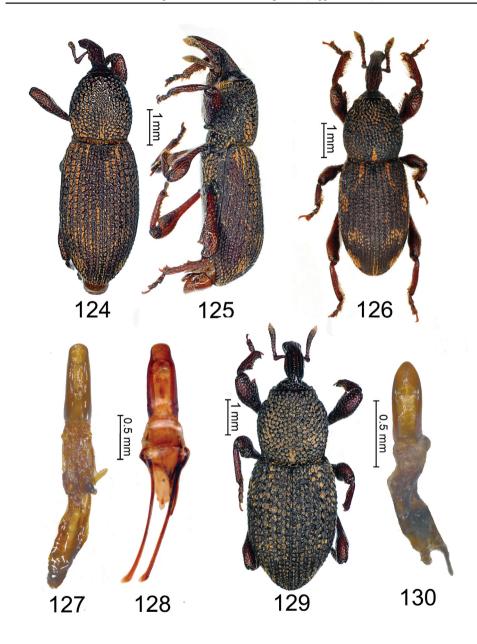
**Distribution.** Endemic to Socotra Island.



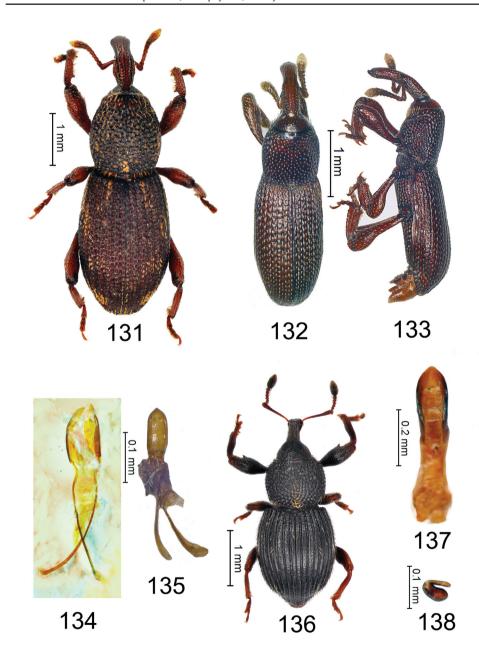
Figs 113–117. 113 – *Endeochetus canui* Perrin, 2000, habitus of a male from Wadi Ayhaft. 114, 116 – *Endeochetus crassirostris* sp. nov.: 114 – habitus of the holotype; 116 – aedeagus of a paratype in dorsal view. 115, 117 – *Endeochetus helenae* sp. nov., holotype: 115 – habitus; 117 – aedeagus in dorsal view.



Figs 118–123. 118, 121 – *Endeochetus saccofrancisci* sp. nov., holotype: 118 – habitus; 121 – aedeagus in dorsal view. 119, 122 – *Endeochetus pressicornis* sp. nov.: 119 – habitus of the holotype; 122 – aedeagus of a paratype in dorsal view. 120, 123 – *Endeochetus maculifer* sp. nov.: 120 – habitus of the holotype; 123 – aedeagus of a paratype in dorsal view.



Figs 124–130. 124–125, 127 – *Endeochetus rugulithorax* sp. nov. 124 – habitus of the holotype; 125 – habitus of the same in side view; 127 – aedeagus of a paratype in dorsal view. 126, 128 – *Endeochetus simillimus* sp. nov. 126 – habitus of the holotype; 128 – aedeagus of a paratype in dorsal view. 129–130 – *Endeochetus simplex* sp. nov., holotype. 129 – habitus; 130 – aedeagus in dorsal view.



Figs 131–138. 131, 134 – *Endeochetus parvus* sp. nov., holotype: 131 – habitus; 134 – broken aedeagus in dorsal view. 132–133, 135 – *Endeochetus minimus* sp. nov.: 132 – habitus of the holotype; 133 – habitus of the holotype in side view; 135 – aedeagus of a paratype in dorsal view. 136–138 – *Hagherius sculptus* sp. nov.: 136 – habitus of a female paratype; 137 – aedeagus of the holotype in dorsal view; 138 – spermatheca of a paratype.

#### Endeochetus simillimus sp. nov.

(Figs 126, 128)

Type series. HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra island // Kazazhan area // shrubland on limestone; sifting // 10.vi.2012 // 12°33.8′N, 54°19.8′E, 540 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 2 ♂ ♂ 2 ♀♀, same label data as holotype (2 NMPC, 2 ECRI); 1 ♂ 1 ♀, 'Yemen, Socotra island // Homhil, protected area // open woodland with *Boswellia & // Dracaena* trees; 10–11.vi.2012 // 12°34.5′N, 54°18.5′E, 360–500 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC).

**Description.** *Male holotype*. Body length 5.1 mm. Dark brown, little shining, coarsely punctured, rostrum, antennae and legs more shining and dark ferruginous. Vestiture as in *E. rugulithorax* sp. nov. (Fig. 126).

*Head.* Rostrum 0.93 as pronotum, its structure similar to that of *E. rugulithorax* sp. nov. Antennae inserted at middle of rostrum; scape almost straight and gradually moderately clubbed; funiculus as in *E. rugulithorax* sp. nov. Head convex, with not very dense small punctures, interocular space as wide as little less than half of rostral width at base; eyes subtriangular, flat.

*Pronotum* as long as wide, shaped like that of *E. rugulithorax* sp. nov.; disc with large roundish coarse punctures only on anterior third partly confluent in form of irregular longitudinal small wrinkles. Scutellum invisible.

*Elytra* 1.73× longer than wide and 1.93 times as long as pronotum. Striae like those of *E. rugulithorax* sp. nov. Interstriae rugosely punctured, punctures irregular, but at least in part identifiable as such, interstriae III to V little raised at base.

Legs moderately elongate; femora clubbed and acutely toothed, densely punctured; tibiae little compressed, curved at base and at apical fifth, punctured, outer margin keeled, inner one toothed at basal third, little concave, setose and strongly serrate apicad of widening, meso- and metatibiae less abruptly than protibiae; tarsi narrow, tarsomere III not bilobed.

*Ventral side*. Tubercles on basal margin of prosternum posteriorly to coxae very small; metaventrite and abdominal ventrites I and II with large shallow common impression.

Variability. Remaining specimens are very similar to the holotype. Females differ from males by their longer rostrum a little less dilated on basal half and here with five thin keels, apicad of antennal insertion their rostrum narrows and is not clearly keeled apart from on sides, whereas towards apex it widens again so that its sides are a little concave; female ventrites are not impressed.

Male genitalia. Aedeagus as depicted in Fig. 128.

Body length 4.7-6.2 mm.

**Differential diagnosis.** Extremely similar to *E. rugulithorax* sp. nov. and with certainty distinguishable from it by the more elongate apex of aedeagus. The longitudinal wrinkles of pronotum of *E. simillimus* sp. nov. are usually more confused and a little more evident on anterior third and on sides of dorsum rather than obvious on all dorsal surface like in *E. rugulithorax*. In addition, the disc of pronotum is more uniformly convex and its sides are as a rule more curved in *E. simillimus* than in *E. rugulithorax*. Elytral intervals of the latter species are also dotted with irregular roundish punctures instead of being rugosely and confusedly punctured as in almost all *E. simillimus*. specimens examined. Moreover, in this latter species

intervals III to V are somewhat raised at base instead of being almost flat, and interval III is a little wider than the adjoining ones.

**Etymology.** The astonishing resemblance of this new species with other Socotran species of the genus and in particular with *E. rugulithorax* sp. nov. is emphasized by its name, Latin superlative adjective *simillimus* (-*a*, -*um*) meaning 'very or most similar'.

**Collection circumstances.** In Kazazhan, the new species was sifted from litter under *Ficus vasta* Forssk. (Moraceae) in a limestone ravine (J. Hájek, pers. comm.).

**Distribution.** Endemic to Socotra Island.

## Endeochetus simplex sp. nov.

(Figs 129–130)

Type material. HOLOTYPE: ♂ (MCCI), 'Socotra (YE) // Berber spring // 8.X.2007 - R. Sindaco'. Paratypes: 1 ♂, 'Socotra (YE) // wadi Egiya // 8.XI.2007 - R. Sindaco' (MCCI); 1 ♀, 'Yemen, Socotra Island // Zemhon area, 270-350 m // N 12°30′58″ E 54°06′39″ // L. Purchart & J. Vybíral Igt.' (NMPC); 1 ♂, 'Yemen, Socotra island // Kazazhan area // shrubland on limestone; sifting // 10.vi.2012 // 12°33.8′N, 54°19.8′E, 540 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.' (NMPC); 1 dead ♀ lacking all its appendages, same label data (ECRI).

**Description.** *Male holotype*. Body length 4.9 mm. Piceous, opaque, coarsely punctured, dorsum of rostrum and legs dark ferruginous. Dorsal vestiture on rostrum composed of sparse golden-brownish half-recumbent small hair-like scales; pronotum with sparse almost recumbent curved elongate brownish hair-like scales; elytra with row of similar almost recumbent thicker scales on intervals; striae with a poorly visible row of recumbent yellowish hair-like scales, striae III, IV and VI at base with some large recumbent subtriangular concave sulcate scales; legs with sparse golden setae; basal two thirds of femora and internal margin of tibiae apicad of tooth with erect silvery or golden long setae. Ventral side densely and coarsely punctured with sparse curved rather short suberect golden hair-like setae (Fig. 129).

Head. Rostrum 0.82 as long as pronotum, regularly curved, coarsely punctured, 5-carinate, middle keel ending little apicad of antennal insertion and replaced by rather strongly punctured area up to near apex; midway from base to antennae rostrum, obliquely seen, angularly dilated; in dorsal view rostrum slightly dilated at basal quarter, then its sides slightly converging toward antennal insertion and little diverging towards apex. Antennae inserted shortly apicad of middle of rostrum; scape curved downward at base, then almost straight and gradually clubbed; funicular antennomere I barely thicker than following ones and twice as long as II; antennomeres III to VII progressively slightly shorter, seventh moderately transverse and annexed to club which is subconical and as long as two preceding antennomeres. Head convex, rather strongly punctured, space between eyes as wide as half of rostral width at base; eyes subtriangular, flat.

*Pronotum* 1.04 times as long as broad, rather abruptly even if moderately constricted near truncate apex, base barely advanced toward scutellum, disc slightly convex, with dense round uniform punctures; sides rounded from base to apical third where pronotum reaches its maximum width. Scutellum small, subtriangular.

*Elytra* 1.42 times longer than wide and 1.76 times as long as pronotum, dorsum almost flat on basal half, then regularly convex towards apex, base little concave, sides slightly curved

from base to middle, then moderately converging towards apex, maximum width at middle. Striae formed by large subrectangular punctures from which starts recumbent lanceolate long yellowish scale. Interstriae little convex, about same width as striae, and with nearly regular row of large round deep punctures.

Legs short; femora strongly clubbed and acutely toothed, tooth of profemora truncate at apex, densely and coarsely punctured; tibiae compressed, curved at extreme base then almost straight, punctured, outer margin keeled, inner one toothed at basal 2/5, concave and strongly serrate apicad of tooth; tarsi quite short and rather narrow, tarsomere III not bilobed.

*Ventral side*. Tubercles on basal margin of prosternum posterior to coxae small, approximate and convex; metaventrite and abdominal ventrites I and II with large shallow common impression.

Male genitalia. Aedeagus as depicted in Fig. 130.

**Variability.** The other male is almost identical to the holotype, except that the teeth of its anterior femora are acute instead of truncate, and females are smaller and have abdomen uniformly convex.

Body length 3.7–5.1 mm.

**Differential diagnosis.** Quite uniform roundish punctures of the dorsal surface, short 5-carinate rostrum, and rounded sides of pronotum make it easy to recognise this species.

**Etymology.** The relatively inornate appearance of the new species caused by its sculpture and vestiture suggested its name, Latin adjective *simplex* meaning among other things, 'simple'. **Distribution.** Endemic to Socotra Island.

# Endeochetus parvus sp. nov.

(Figs 131, 134)

Type material. HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra island // Homhil, protected area // open woodland with *Boswellia & // Dracaena* trees; 10-11.vi.2012 // 12°34.5′N, 54°18.5′E, 360-500 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratype: 1 ♀, same label data as holotype (NMPC).

**Description.** *Male holotype.* Body length 4.4 mm. Dark ferruginous, just little shining, rather coarsely punctured, rostrum, legs and antennae paler, posterior two thirds of pronotum brownish. Dorsal vestiture on rostrum composed of sparse half-recumbent golden-brownish small hair-like centripetal scales; head bare; pronotum with sparse almost recumbent elongate curved brownish hair-like scales pointing forward; elytra with row of similar shorter scales sparse on intervals; some recumbent more or less elongate yellowish scales form pattern of Fig. 131; legs with sparse almost recumbent golden setae; basal two thirds of femora and internal margin of tibiae apicad of dilatation with long erect golden setae. Ventral side very densely and coarsely punctured with fairly sparse rather short suberect golden setae (Fig. 131).

Head. Rostrum 0.67× as long as pronotum, regularly and strongly curved, coarsely punctured, basal half tricarinate, both lateral carinae just little converging towards base, punctures confluent on sides of thin keel of basal half, whereas just basad of antennal insertion rostrum becomes 5-keeled up to antennal insertion; in dorsal view rostrum moderately dilated apicad of basal fifth, then its side converging up to little apicad of antennal insertion, then they are barely concave up to near apex, where they are slightly dilated. Antennae inserted at middle

of rostrum; scape almost straight and slightly and gradually clubbed; funicular antennomere I barely thicker than following ones and little longer than II; antennomeres II to VII progressively slightly shorter, last one moderately transverse and annexed to club which is suboval and as long as two preceding antennomeres. Head convex, minutely punctured, interocular space as wide as little more than half of rostral width at base. Eyes elongate oval, flat.

*Pronotum* 1.10 times as long as wide, slightly constricted near truncate apex, base barely bisinuous, disc rather flat on apical half and impressed in front of scutellar area, with large coarse round punctures; sides regularly rounded, maximum width at middle. Scutellum invisible.

Elytra 1.45 times as long as wide and 1.78× as pronotum, dorsum flat and slightly impressed on basal third, then quite moderately convex on apical declivity, base slightly concave, sides only slightly curved on basal two thirds then moderately converging towards apex, maximum width at apical third. Striae of large subquadrate punctures. Interstriae almost flat and barely wider than striae, with rugose and irregular punctures, III, V and VII hardly convex at base.

Legs moderately elongate; femora strongly clubbed and acutely toothed, densely and coarsely punctured; tibiae compressed, curved at extreme base then almost straight, punctured, outer margin keeled, inner one dilated at basal third, concave and strongly serrate apicad of widening; tarsi narrow, tarsomere III not bilobed.

*Ventral side*. Tubercles on basal margin of prosternum posteriorly to coxae small but quite acute; metaventrite and abdominal ventrites I and II with large shallow common impression. *Male genitalia*. Aedeagus as depicted in Fig. 134.

**Variability.** The female is almost identical to the male, apart from its rostrum a little thinner and longer and its lack of ventral depression. The anterior left tibia and tarsus, the right ungular tarsomere, and both mesotibiae are missing. Body length 4.0 mm.

**Differential diagnosis.** Although quite similar to other Socotran *Endeochetus*, this new species is readily set apart by its small size and not strongly shining surface. See the key below for differences from other species of the genus.

**Etymology.** The species name, Latin adjective *parvus* (-*a*, -*um*) meaning 'small', was chosen in reference to the tiny size of the new species.

**Distribution.** Endemic to Socotra Island.

#### Endeochetus sp. 2 near simplex sp. nov.

**Material examined** (1 spec.). **YEMEN: Socotra Island:** Wadi Ayhaft,  $12^{\circ}36'38''N$   $53^{\circ}58'49''E$ , 190 m, 1  $\bigcirc$ , P. Kabátek leg. (NMPC).

**Notes.** This single specimen belongs to a new species close to *E. simplex* sp. nov., differing by the large flattened pronotum with quite strongly rounded sides. It is not described here waiting for the possibility of studying the male. Body length 5.9 mm.

#### Endeochetus minimus sp. nov.

(Figs 132, 133, 135)

Type material. HOLOTYPE: ♂ (MCCI), 'Socotra (YE) // wadi Ayhaft // 30.X.2007 - R. Sindaco'. PARATYPES: 2 ♂♂, same label data as holotype (1 MUPI, 1 ECRI); 1 ♂, 'Socotra (YE) // wadi Thruba // 2.III.2008 - R. Sindaco' (MUPI).

**Description.** *Male holotype.* Body length 3.3 mm. Brown, shining, rather densely and finely punctured, rostrum, head and legs rusty-brown. Dorsal vestiture composed of sparse golden-brownish recumbent small hair-like scales arranged in a row on striae and on intervals; base of rostrum and anterior margin of pronotum on sides and beneath with long suberect golden setae; basal 3/4 of femora with few moderately erect rather short silvery setae, whereas internal margin of tibiae apicad of widening is set with long erect silvery or golden setae. Ventral side densely punctured with sparse curved rather short slightly erect suberect golden hair-like setae, some of which, longer and raised, are on ventrites (Figs 132–133).

Head. Rostrum as long as pronotum, regularly and strongly curved, rather finely punctured, with weak carina on basal half, beyond antennal insertion with two lateral fine grooves ending just basad of sides of epistome; little basad of antennae rostrum (obliquely seen) weakly dilated; in dorsal view basal half of rostrum subparallel sided; at antennal insertion rostrum narrows and then its sides are slightly diverging towards apex. Antennae inserted at middle of rostrum; scape almost straight and gradually clubbed; funicular antennomere I barely thicker than following ones and about as long as II; antennomeres II to VII short and progressively slightly diminishing in length, VII transverse and annexed to club which is subconical and as long as two preceding antennomeres. Head convex, very finely punctured, space between eyes slightly wider than half of rostral width at base; eyes subtriangular, flat.

*Pronotum* 1.11 times as long as broad, apex truncate, base barely advanced toward scutellum, disc quite flat, with rather dense roundish to oval not very large punctures intervals of which are rugosely longitudinally confluent on sides; sides gently rounded, maximum width at middle. Scutellum invisible.

*Elytra* Twice as long as wide and 2.13 times as long as pronotum, dorsum almost flat along basal 3/4, then moderately convex towards apex, base weakly notched around scutellum, sides very weakly curved, maximum width at apical two thirds. Striae sulciform, catenulate. Interstriae almost flat, slightly wider than striae, with nearly regular row of round punctures.

Legs relatively elongate; femora rather strongly clubbed and acutely toothed, moderately densely punctured; tibiae compressed, curved at base and at apical 4/5, punctured, outer margin keeled, inner one strongly dilated at basal 2/5, concave and minutely serrate apicad of widening, more so on protibiae; tarsi rather narrow, tarsomere III not bilobed.

*Ventral side*. Tubercles on basal margin of prosternum posteriorly to coxae approximate and rather convex; metaventrite and abdominal ventrites I and II with large shallow common impression.

**Variability.** Paratypes are almost identical to the holotype.

Male genitalia. Aedeagus as depicted in Fig. 135.

Body length 2.8–3.9 mm.

**Differential diagnosis.** *Endeochetus minimus* sp. nov. is unmistakable because of its small size, shiny integument and sparse, scarcely apparent vestiture. See also the key below.

**Etymology.** The new species takes its name, Latin superlative adjective *minimus* (-a, -um) meaning 'the smallest', from its very small size.

**Distribution.** Endemic to Socotra Island.

# Identification key to Endeochetus species

**Note.** The species of *Endeochetus* hitherto described can be identified using the key below into which the African species were included basing on the original descriptions of all the species known and their synonyms (Fairmaire 1897; Kolbe 1898; Hustache 1932, 1937; Marshall 1940, 1951), and on the key by Marshall (1951).

1	Size up to 4.5 mm. Dorsal vestiture very sparse
_	Larger than 4.5 mm. 4
2	No elytral yellowish patches. Vestiture extremely thin and sparse, beetle appears bare
	and shining. Body very narrowly elongate, elytra about twice as long as wide. Pronotum
	without median keel. Socotra. E. minimus sp. nov.
_	Elytra with yellowish patches. Vestiture sparse but obvious. Body moderately elongate,
	elytra about one and half times as long as wide
3	Pronotum with abbreviated median keel. Cameroon <i>E. maculatus</i> Hustache, 1937
_	Pronotum with no trace of median keel. Socotra E. parvus sp. nov.
4	Rostrum very elongate, at least slightly longer than pronotum and rugosely punctate dor-
	sally, dorsal carina lacking. Elytral intervals with row of obvious long suberect capitate
	yellowish and brown scales. Striae formed by very large rectangularly elongate punctures.
	Internal margin of meso- and metatibiae lacking saw-like teeth. Socotra
_	Not with all of the above features. 5
5	Elytra with yellowish quadrate humeral patch. Rostrum constricted near base. Pronotum
	globular with moderately large punctures and with smooth median line. Elytral intervals
	costate and granulate on basal half. Kenya E. turneri Marshall, 1940
_	Not with all of the above features. 6
6	Funicular antennomere II little longer than I, VII moderately transverse. Male rostrum
	about as long as pronotum, dorsally punctured, median keel obvious from one quarter of
	rostral length up to its apical fifth. Large punctures of pronotum and elytra with recumbent
	adpressed yellow scales in form of dots. In fresh specimens apical third of elytra yellow
	with brownish transverse patch on apical declivity. Socotra E. helenae sp. nov.
_	Funicular antennomere II not longer than I
7	Metafemora exceeding in length elytral apex. Funicular antennomere VII longer than
	broad. Continental Africa.
_	Metafemora not exceeding in length elytral apex. Funicular antennomere VII not longer
0	than broad. 9
8	Rostrum longer than pronotum, latter with large dense rugose punctures. Elytra with
	defined yellowish patches at shoulders and bisinuate band on posterior half. Metafemora
	with two conspicuous whitish patches on dorsum. Tanzania <i>E. elegans</i> (Fairmaire, 1807)
	1897)  Restrum not longer than proportion, letter usually finally regulace. Eletro with indefinite
_	Rostrum not longer than pronotum, latter usually finely rugulose. Elytra with indefinite markings of pale brown scales. Metafemora lacking conspicuous whitish patches on
	dorsum. Kenya
	uuisuin. Kenya E. tettensis Maishall, 1931

9	Funicular antennomeres III to VII strongly flattened and at least twice as wide as long.
	Tibial teeth very large and acute. Socotra
_	twice as wide as long
10	Funicular antennomeres V to VII subtrapezoidal and usually transverse, VII somewhat
10	annexed to club. If pronotum is almost globular, then it is longer than wide and its disc
	has no smooth median line. Socotra.
_	Funicular antennomeres V to VII globular, VII not annexed to club. Pronotum almost
	globular, little shorter than broad, disc with smooth median line. Kenya.
	<i>E. laevicollis</i> Marshall, 1940
11	Larger than 7.0 mm. Cuticle rugosely and coarsely punctured. Elytra subdepressed around
	scutellum. 12
_	Smaller than 6.5 mm
12	Larger than 8.8 mm. Rostrum stout, 5-carinate, slightly widening apically. Pronotum
	sulcate. Odd elytral intervals more raised than even ones at least on basal half
	E. crassirostris sp. nov.
_	$Smaller\ than\ 7.5\ mm.\ Rostrum\ elongate,\ not\ distinctly\ carinate.\ Pronotum\ not\ sulcate.$
	Odd elytral intervals as convex as even ones
13	Dorsal surface of both pronotum and elytra with rather uniform large round scaled punc-
	tures in form of dots. Rostrum stout, constricted at base and with five strong carinae.
	Antennae very stout, funicular antennomeres III to VII strongly transverse.
	E simular su man
	E. simplex sp. nov.
- 1 <i>1</i>	Not with all of above features.  E. simplex sp. nov.
- 14	Not with all of above features. Least in part confluent to form longitudinal wrinkles. Rostrum
- 14	Not with all of above features. 14  Punctures on pronotal disc at least in part confluent to form longitudinal wrinkles. Rostrum of both sexes strongly dilated halfway from base and antennal insertion. 15
- 14 -	Not with all of above features
- 14 -	Not with all of above features
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## Subfamily Conoderinae Tribe Menemachini

### Hagherius gen. nov.

Type species. Hagherius sculptus sp. nov., by present designation.

**Description.** Body rather small, quite plump, devoid of scales but with rather sparse setae, cuticle shining, pronotum strongly punctured, elytra with deep sulciform striae. Flightless. Funiculus with seven antennomeres. Eyes dorsal, almost flat and subcontiguous in middle. Femora dentate, profemora slightly larger than meso- and metafemora. Tibiae with rather strong apical uncus. Claws simple. Prosternum with no trace of rostral channel, procoxae almost contiguous, base of prosternum moderately bulging in middle: mesocoxae separated by distance slightly less than their diameter, metacoxae small and separated by twice their diameter. Prosternum, meso- and metaventrite very strongly punctured, punctures on abdominal ventrites dense and deep but half as large as sternal ones. Ventrites I and II of about same length laterally, both slightly longer than combined length of III+IV, ventrite V crescent-shaped and as long as III+IV, sutures between ventrites slightly arched with convexity backwards. In male ventrites I and II flat.

**Differential diagnosis.** A very isolated genus difficult to place in any of the currently recognised tribes, although it appears somewhat more related with Menemachini than with any other Conoderinae. Shining body devoid of scales and only bearing thin setae already makes *Hagherius* gen. nov. immediately recognisable not only from the hitherto described Menemachini, but also from all Conoderinae. Other peculiar characters of this new genus are strongly coarsely punctured pronotum and deeply sulcate elytra with flat intervals in addition with finely acutely dentate femora and uncinate tibiae, features which make *Hagherius* gen. nov. unmistakable. Other Menemachini, almost all African except a few distributed in southeast Asia, Japan and Australia (Alonso-Zarazaga & Lyal 1999), have always at least some patches of scales on pronotum and elytra and cannot be confused with this new genus. On the other hand, and considering the unclear tribal taxonomy of this subfamily (Prena et al. 2014), there is no genus of Conoderinae which can be considered even similar to *Hagherius* gen. nov. which probably evolved in Socotra from a very ancient settlement by its ancestors. **Etymology.** The genus takes its name from the Hagher Mountains where its single member was collected. Gender is masculine.

# Hagherius sculptus sp. nov.

(Figs 136-138)

Type material. HOLOTYPE: ♂ (NMPC), 'Yemen, Socotra Island // Hagher Mts., Scand Mt. env. // montane evergreen woodland // 16–18.vi.2012 // 12°34.6′N E 54°01.5′E, 1450 m', 'Socotra expedition 2012 // J. Bezděk, J. Hájek, V. Hula, // P. Kment, I. Malenovský, // J. Niedobová & L. Purchart leg.'. Paratypes: 3 ♀♀, same label data as holotype (2 NMPC, 1 ECRI).

**Description.** *Male holotype*. Body length 2.8 mm. Piceous, shining, rostrum, legs and antennae brown, apical antennomere (club excepted) little paler. Dorsal vestiture composed of rather sparse half-recumbent golden-brownish hair-like scales longer and arranged in two irregular rows on elytral intervals. Ventral side rather densely and coarsely punctured with

fairly sparse rather short almost recumbent golden setae.

Head. Rostrum 0.90 as pronotum, moderately curved, somewhat compressed on basal 3/4 and here with punctures forming 2–3 irregular lateral striae, in dorsal view widening at apical third where rostrum slightly compressed and finely punctured, apical fifth bearing some erect fairly long setae. Antennae inserted at apical quarter of rostrum; scape almost straight and quite abruptly clubbed, its anterior margin bearing three long erect setae near apex; funicular antennomere I thicker and slightly longer than second, latter slightly less than twice as long as wide; antennomeres III to VII moniliform and progressively slightly shorter, apical three moderately transverse; club fusiform and slightly longer than three preceding antennomeres. Head globular, minutely punctured; eyes dorsal, elliptical, almost flat, slightly sunken, and subcontiguous at middle.

*Pronotum* 0.83 times as long as wide, rather strongly constricted towards apical and basal margins, apex truncate, base slightly bisinuous; disc quite flat and barely depressed in front of scutellar area, and here bearing some centripetal whitish recumbent setae longer that sparse erect ones of rest of surface; sides rather strongly rounded, maximum width at middle. Scutellum minute.

*Elytra* 1.20 times as long as wide and twice as long as pronotum, dorsum flat only near scutellum, then moderately convex, base slightly concave, sides moderately curved on basal two thirds then quite abruptly converging towards acute apex, maximum width at middle. Striae sulciform, deep, and with catenulate punctures at bottom. Interstriae almost flat, slightly wider than striae, with small irregular punctures.

Legs quite short, particularly middle and posterior ones; femora strongly clubbed, anterior ones more strongly and acutely toothed than middle and posterior ones, alutaceous and with almost recumbent long setae; tibiae slightly compressed, curved at base then almost straight, alutaceous, inner and outer margin bearing semierect setae; tarsi short, rather narrow, tarsomere III slightly bilobed.

Ventral side. Abdominal ventrites I and II slightly depressed together.

Male genitalia. Aedeagus as depicted in Fig. 137.

**Variability.** Females are very similar to the holotype, differing from it by their slightly more convex elytra and lack of abdominal depression (Fig. 136).

Female genitalia. Spermatheca as depicted in Fig. 138.

Body length 2.6-2.9 mm.

**Etymology.** The species name, the Latin adjective *sculptus* (-*a*, -*um*), meaning 'engraved', is in reference to the strongly punctured pronotum and deep elytral striae of the new species. **Distribution.** Endemic to Socotra Island.

# Short zoogeographic notes

The Curculionoidea here recorded, of which 11 could be identified only at generic level (either because they were represented by single or few specimens, or because of our poor knowledge of the taxa to which they belong) are distributed in families as follows: 2 Apionidae, 1 Nanophyidae, 2 Brachyceridae and 66 Curculionidae. Although it is certain that additional species will be found in the future, some comments about their relationships can be

attempted, even though some of the so far unnamed species cannot be included in this short analysis. Considering the position of Socotra 'near the junction of three major biogeographic regions, the Afrotropical, the Oriental and the Palaearctic' (Wrank 2003: 28), and bearing in mind the already discussed inadequate knowledge of the fauna of the Afrotropical and Oriental Regions, the high percentage of endemics living in the island of Socotra once more emerges. At present there are 12 curculionoid genera of which all members are endemic to Socotra: Bezdekiellus gen. nov. (1 species), Hajekia gen. nov. (7 species), Armifemur gen. nov. (1 species), Elwoodius gen. nov. (1 species), Dipnotyphlus gen. nov. (1 species), Parvorhynchus gen. nov. (1 species), Ericiates gen. nov. (2 species), Nesotocerus gen. nov. (4 species), Socotracerus gen, nov. (4 species), Socotractus gen, nov. (3 species), Tuberates gen, nov. (1 species), and *Hagherius* gen. nov. (1 species). Of these, *Ericiates* gen. nov., *Nesotocerus* gen. nov., Socotracerus gen, nov., Socotractus gen, nov. and Tuberates gen, nov. are closely related to African genera, whereas Bezdekiellus gen. nov., Hajekia gen. nov., Armifemur gen. nov., and perhaps Hagherius gen. nov., Elwoodius gen. nov., and Dipnotyphlus gen. nov. possibly represent quite ancient lineages that may have settled via the Indian Ocean, some of these taxa being somewhat related to genera occurring in the Oriental and even Pacific Regions. More problematic is to understand the relationship of *Parvorhynchus* gen. nov., belonging to a poorly defined tribe whose members are primarily Palaearctic, but which is perhaps a relict of an early colonization by its ancestors dating back to the tertiary. The vast majority of the remaining taxa are of Afrotropical origin, except the unnamed Rhinusa sp. which belongs to a hitherto exclusively Palaearctic genus. Allomalia setulosa, Smicronyx pauperculus and Hypolixus pica are the only species widely distributed across the Afrotropical Region and often extending to the Palaearctic Region. The abundance of *Endeochetus* is noteworthy, a genus which underwent a possibly rapid series of speciation events in Socotra, since 13 species (including two unnamed) are now reported from this island, whereas in the whole of Africa there are only five described taxa. Another peculiarity of Socotra is that some common and widespread weevil groups, like Baridinae and the Entiminae: Cyphicerini, which are all well represented both in the nearby Somalia and in the south of the Arabian Peninsula, are apparently absent. This agrees with a statement by Wranik (2003: 28): 'the absence of many widespread mainland species on Socotra seems to point to certain other barriers existing to the passive colonization by wind, water and trade'.

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