

Mordellidae (Coleoptera) from Socotra Island

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Abstract. Five species of the family Mordellidae from Socotra Island are described and illustrated: *Mediimorda socotrensis* sp. nov., *Mordellina (Pseudomordellistena) purcharti* sp. nov., *Mordellina (Pseudomordellistena) janae* sp. nov., *Mordellina (Pseudomordellistena) stastnyi* sp. nov. and *Ermischiella bejceki* sp. nov. Keys to species of the genus *Ermischiella* Franciscolo, 1950 and subgenus *Pseudomordellistena* Ermisch, 1952 of *Mordellina* Schilsky, 1908 are provided.

Key words. Coleoptera, Mordellidae, *Mediimorda*, *Mordellina*, *Pseudomordellistena*, *Ermischiella*, new species, keys, Yemen, Socotra

Introduction

Socotra is an island (3,550 km²) in the Indian Ocean east of the Gulf of Aden. It is built of volcanic rocks and metamorphic Precambrian rocks covered by younger sediments (limestones, sandstones). The Socotran fauna and flora are characterized by a high degree of endemism resulting from the long lasting isolation of the island. This can also be exemplified by the species of the beetle family Mordellidae.

The Mordellidae material examined contains 163 specimens representing five species of three genera. All the species are classified as new to science. The genus *Mediimorda* Méquignon, 1946 is so far known to occur in the Palaearctic Region, south Africa, Madagascar and Yemen (FRANCISCOLO 1965, PANKOW 1981, HORÁK 2008), but more species from east Africa, India and southeast Asia are waiting their description (J. Horák, in prep.). The two collected genera *Mordellina* Schilsky, 1908 and *Ermischiella* Franciscolo, 1950 belong to the tribe Mordellistenini, both occurring in the Afrotropical, Oriental and Palaearctic Regions (HORÁK 2008, 2011).

Material and methods

The basic material from the Socotra Island was obtained while solving the Socotra Project, between 1999 and 2010, within the framework of the international development Programme – help given to the Republic of Yemen by the Czech Republic. It was supplemented by two

specimens collected by W. Wranik (University of Rostock, Germany) in 1999, but particularly by the material collected within the framework of the project INGO MŠMT ČR LA10036 ‘Participation of young scientists of Mendel University in Brno, in the research activities of IUFRO – The Global Network for Forest Science Cooperation’.

The specimens included in this study are deposited in the following institutional and private collections:

- BMNH The Natural History Museum [formerly British Museum (Natural History)], London, United Kingdom (Maxwell V. L. Barclay);
 CULS Czech University of Life Sciences, Faculty of Forestry and Wood Sciences, Prague, Czech Republic (Jan Farkač);
 JBCP Jan Batelka collection, Prague, Czech Republic;
 JHCP Jan Horák collection, Prague, Czech Republic;
 NMPC Národní muzeum, Prague, Czech Republic (Jiří Hájek);
 URRG Universität Rostock (Fachbereich Biologie, Meeresbiologie), Rostock, Germany (Wolfgang Wranik).

Systematics

Tribe Mordellini

Mediimorda socotrensis sp. nov.

(Figs. 1–9)

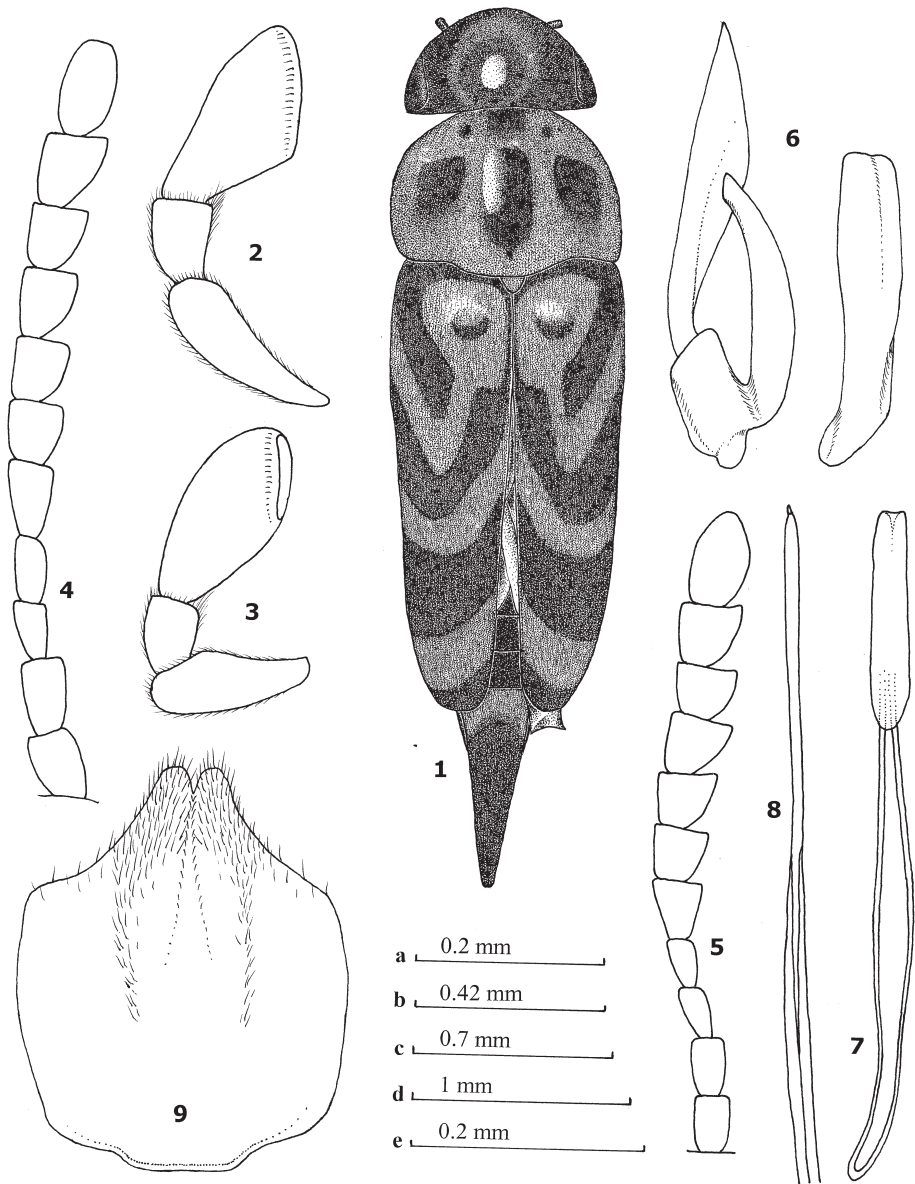
Type locality. Yemen, Socotra Island, wadi Esgego.

Type material. HOLOTYPE: ♂, Yemen, Socotra Isl., Esdegob, 24.ii.2000, V. Bejček & K. Šťastný leg. (NMPC). ALLOTYPE: ♀, Magasu [Yemen, Socotra Isl.], iii. 1999, „Zoologische excursion“, [W.] Wranik leg. (URRG). PARATYPES: 1 ♂, same data as holotype (JHCP); 1 ♂, same data as allotype (URRG); 1 ♀, Yemen, Socotra Isl., Deiqub cave env., 10.vi.2010, V. Hula & J. Niedobová leg. (JHCP); 1 ♀, Yemen, Socotra Isl., Qualentiah env., slopes 5 km SE from Quaysoh, N 12°39.691' E 053°26.658', 4.–5.vi.2010, V. Hula & J. Niedobová leg. (JHCP); 1 ♂ 2 ♀♀, Yemen, Socotra Isl., Zemhon area, 270–300 m, N 12°30.58' E 054°06.39', 16.–17.vi.2010, V. Hula leg. (JHCP); 1 ♂, Yemen, Socotra Island, Noked plain (sand dunes), Sharet Halma vill. env., 20 m, 12°21.9'N, 54°05.3'E, 10.–11.xi.2010, L. Purchart leg. (JHCP); 42 ♂♂ 10 ♀♀, Yemen, Socotra Isl., Dixam plateau, Firmihin, *Dracaena* [*cinnabari*] forest, 490 m, 12°28.6'N 54°01.1'E, 15.–16.xi.2010, J. Bezděk leg. (BMNH, CULS, JHCP); 9 ♂♂ 3 ♀♀, same data, but J. Hájek leg. (NMPC); 3 ♂♂ 1 ♀, same data, but Jan Batelka leg. (JBCP); 1 ♀, Socotra Isl. (Ye), Noked plain (sand dunes), Sharet Halma vill., 20 m, 12°21.9'N, 54°05.3'E, 10.–11.xi.2010, Jan Batelka leg. (JBCP); 3 ♂♂ 1 ♀, Yemen, Socotra island, wadi Denegen, 6 km SE Hadibo, 140 m a.s.l., 12°36'42"N; 54°03'41"E, 4.v.2004, A. Reiter leg. (NMPC).

Description. Male holotype. Small, rather slender and parallel-sided (Fig. 1). Ground colour black, anterior legs, antennae and maxillary palpi dark black-brown; galea, lacinia, anteclypeus, anterior margin of labrum and base of mandibles yellowish-brown. Pubescence of dorsum black with faint violet lustre and characteristic golden-silvery pattern (Fig. 1).

Body length from tips of mandibles to tips of elytra 3.2 mm, to tip of pygidium 4.0 mm.

Head flatly convex, wider than long (width to length ratio 5.3 : 4.5), narrower than pronotum (ratio of head width to pronotal width 5.3 : 6.0), only indistinctly narrowed at mouth part, with golden-silvery pubescence. Labrum narrow, almost twice as wide as long (width to length ratio 3.0 : 1.3). Eyes elongate oval, almost 1.5 times longer than wide, not emarginate at insertions of antennae, very finely faceted, with short and sparse setae. Temples absent, slightly distinct temporal angles developed on ventral side. Maxillary palpomere II (Fig. 2) only moderately wider than palpomere III, terminal palpomere narrowly securiform, with inner angle situated



Figs. 1–9. *Medimorda socotrensis* sp. nov. 1 – habitus; 2–3 – maxillary palpus; 4–5 – antenna; 6 – paramere; 7 – phallobasis; 8 – apical part of penis; 9 – ♂ sternite VIII. 1, 2, 4, 6–9 – holotype (♂); 3, 5 – allotype (♀). Scale: a – 4–6; b – 7–8; c – 9; d – 1; e – 2–3.

at midlength. Antennae (Fig. 4) with antennomeres III and IV of equal length, antennomere V strongly conical and conspicuously longer than IV, antennomeres VI–X about as long as wide and indistinctly shorter than antennomere V; terminal antennomere oblong oval. Galea short, only slightly longer than lacinia, with yellow cirrose outgrowths at distal end.

Pronotum moderately convex, wider than long (width to length ratio 6.0 : 5.0). Anterior angles hardly visible from above, anterior margin semicircular, without distinct neck-shaped protuberance. Basal lobe semicircular, occupying somewhat less than one third of basal margin width. Sides in lateral view slightly convex, posterior angles rather sharp and moderately obtuse. Punctuation sparse, rasp-like. Five spots of darker setae present on pronotum.

Scutellum small, subtriangular with rounded apex, with coarse rasp-like punctures and golden-silvery pubescence.

Elytra flatly convex, rather parallel-sided in basal third, gradually narrowed behind it, 1.9 times longer than their combined width, separately rounded at apex. Sides in lateral view strongly arcuate, elytral epipleuron at base short and strongly enlarged. Pubescence black except for golden-silvery dorsal pattern (Fig 1).

Ventral surface with golden-silvery vestiture. Only small spot at posterior margin of metaventrite besides elytra, oval spot at posterior margin of ventrite I besides elytra, and analogous spot on ventrite II, which is longer, reaching middle of dorsal length of segment, are black; entire posterior margins of ventrites III–IV bear black pubescence.

Pygidium elongate, conical, about twice as long as hypopygium and reaching somewhat less than half elytral length, obliquely truncate at apex. Pubescence black except for narrow basal ringlet of golden-silvery setae.

Protibiae straight, without swelling and without longer setae at base, longer than protarsi (ratio of tibia length to tarsus length 3.0 : 2.5). Protarsomere IV strongly bilobed, without distinct onychium on ventral side. Mesotibiae as long as middle tarsi. Metatibiae with short apical ridge reaching nearly one third tibia width and, one distinct dorsal ridge, metatarsomeres without ridges. Terminal spurs of metatibia black, and outer spur two thirds shorter than inner one.

Male genitalia as in Figs. 6–8, shape of urosternite VIII illustrated in Fig. 9.

Female allotype. Antennae (Fig. 5) shorter, antennomeres VI–X wider than long, terminal antennomere distinctly shorter than in male. Terminal maxillary palpomere (Fig. 3) with inner angle strongly rounded. Pygidium short, thicker and one third longer than hypopygium. Body length from tips of mandibles to tips of elytra 3.3 mm, to tip of pygidium 3.7 mm.

Variability. Body shape and colour pattern very uniform. Total length, measured from tips of mandibles to apex of pygidium, ranging between 3.5 and 4.0 mm.

Differential diagnosis. *Mediomorda socotrensis* sp. nov. differs from all the known species of the genus at the first sight in a different pattern of elytra (HORÁK 1985; LEBLANC 2002, 2007) and, compared to *M. bipunctata* (Germar, 1827), it has two transverse black bars behind midlength of elytra. It also differs in its minute stature, very short prolongation of maxillary area and a short, very broad labrum, 2.5 times wider than long; in *M. bipunctata* it is only 1.5 times wider than long.

Etymology. The specific name refers to the name of Socotra Island, where the new species was discovered.

Collection circumstances. Large series of specimens from Firmihin was collected from flowering bushes of *Ochradenus* sp. (Resedaceae) (J. Hájek, pers. comm.).

tribe *Mordellistenini**Mordellina (Pseudomordellistena) janae* sp. nov.

(Figs. 10–21)

Type locality. Yemen, Socotra Island, Deiqub cave, ca. 12°23.1'N, 54°00.9'E, 115 m.

Type material. HOLOTYPE: ♂, Yemen, Socotra Isl., Deiqub cave env., 10.vi.2010, V. Hula & J. Niedobová leg. (NMPC). ALLOTYPE: ♀, Yemen, Socotra Isl., Haqher [Haghier] Mts, Skant, N 12°34.557' E 54°01.514', 7.–8.vi.2010, V. Hula & J. Niedobová leg. (JHCP). PARATYPES: 5 ♀♀, same data as allotype (JHCP); 1 ♀, Yemen, Socotra Island, Diksam plateau, Bidehor, Digeila, cave env., 920 m, 12°30'31"N 53°56'18"E, 8.ii.2010, L. Purchart & J. Vybíral leg. (JHCP); 2 ♂♂ 2 ♀♀, Yemen, Socotra Isl., Al Haqhier Mts., wadi Madar, 1180–1230 m, 12°33.2'N 54°00.4'E, 12.–14.xi.2010, J. Bezděk leg. (JHCP); 1 ♂ 1 ♀, Yemen, Socotra Isl., Al Haqhier Mts, Scant Mt. env., 1450 m, 12°34.6'N 54°01.5'E, 12.–13.xi.2010, L. Purchart leg. (JHCP); 2 ♂♂ 2 ♀♀, same data, but J. Bezděk leg. (JHCP); 1 ♂ 2 ♀♀, same data, but J. Hájek leg. (NMPC); 1 ♂, same data, but Jan Batelka leg. (JBPC); 2 ♀♀, Yemen, Socotra Isl., wadi Ayhaft, 200m, 12°36.5'N 53°58.9'E, 7.–8.xi.2010, J. Hájek leg. (NMPC).

Description. Male holotype. Body slender, rather parallel-sided, only moderately convex (Fig. 10). Ground colour blackish-brown, only head, anterior third of pronotum, maxillary palpi, antennae, anterior and mid legs reddish-brown. Terminal spurs of posterior tibiae yellowish-brown. Pubescence golden-yellow, on elytra with faint blue-green lustre.

Body length from tips of mandibles to tips of elytra 3.8 mm, to tip of pygidium 4.8 mm.

Head distinctly flatly convex, only indistinctly wider than long (width to length ratio 6.8 : 6.5), distinctly prolonged at mouth parts. Eyes (Fig. 17) of usual size, broadly oval, emarginate at insertions of antennae, coarsely faceted, with short setae, posterior margins with very narrow temporal border, temporal angles not developed. Maxillary palpus (Fig. 11) with palpomere II distinctly wider than palpomere III, palpomere II nearly twice as long as wide; terminal palpomere rather broadly securiform with distinctly rounded inner angle and its outer side gently convex. Antennae (Fig. 13) long and filiform; antennomeres I and II subequal, antennomere III almost as long as and distinctly narrower than antennomere II; antennomere IV nearly three times as long as wide, indistinctly wider and almost twice as long as antennomere III; following antennomeres gradually slightly shorter than antennomere X, antennomere X 2.6 times as long as wide; terminal antennomere long oval, with moderately narrowed apex, 2.6 times as long as wide and 1.2 times as long as penultimate one.

Pronotum wider than long (width to length ratio 14.0 : 11.0), anterior margin with very slightly neck-shaped protuberance. Lateral margin of pronotum only moderately emarginate, posterior angles nearly rectangular with rounded apex. Dorsal surface with sparse rasp-like punctures.

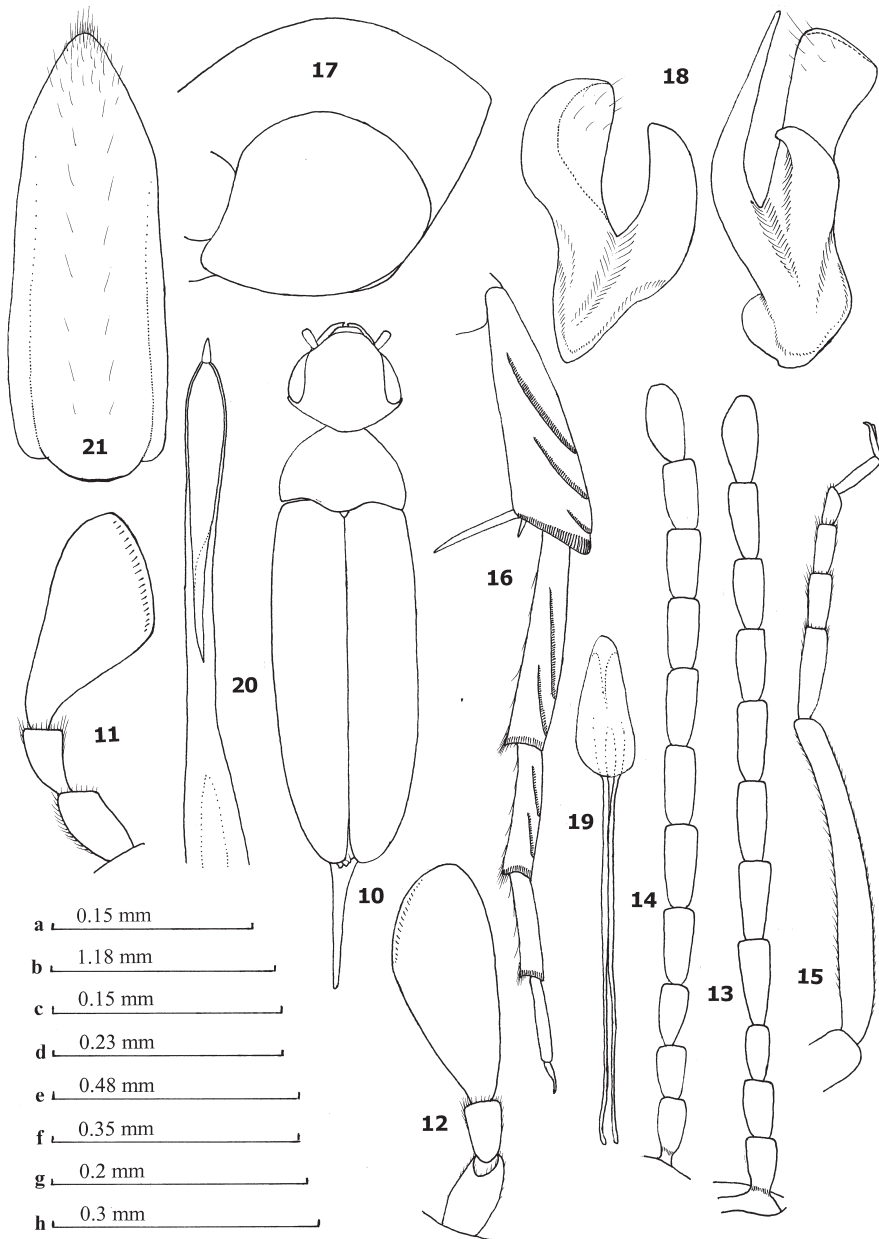
Scutellum very small, triangular with moderately rounded apex.

Metaepisterna long, three times as long as wide, at base twice as broad as on sternal side, which is truncate.

Elytra in basal half almost parallel-sided, almost three times as long as their combined width at shoulders, separately rounded at apex. Punctuation dense and rather coarse, rasp-like.

Pygidium slender, narrowly conical, three times longer than hypopygium.

Protibia gently curved inward, at base with gentle calf-like swelling and without longer setae. Protarsomere I only moderately shorter than two following ones together, protarsomere IV only indistinctly longer than wide, terminal tarsomere twice as long as preceding one. Mesotibia distinctly shorter than mesotarsus. Metatibia besides short apical ridge with two



Figs. 10–21. *Mordellina (Pseudomordellistena) janae* sp. nov. 10 – habitus; 11–12 – maxillary palpus; 13–14 – antenna; 15 – protibia and tarsus; 16 – metatibia and tarsus; 17 – eye; 18 – paramere; 19 – phallobasis; 20 – apical part of penis; 21 – ♂ sternite VIII. 10–11, 13, 15–21 – holotype (♂); 12, 14 – allotype (♀). Scale: a – 11–12; b – 10; c – 13; d – 19–20; e – 16; f – 13–15; g – 17; h – 21.

very oblique ridges. Metatarsomeres I–II with two very oblique ridges, metatarsomere III without ridges. Outer terminal spur of metatibia one fourth shorter than inner one.

Genitalia as Figs. 18–20, shape of urosternite VIII as in Fig. 21.

Female allotype. Body more robust than in male, 4.3 mm long from tips of mandibles to apex of elytra and 5.4 mm long from tips of mandibles to apex of pygidium. Antennae (Fig. 14) shorter, antennonomere X twice as long as wide. Terminal maxillary palpomere (Fig. 12) broadly securiform, with strongly rounded inner angle.

Variability. Body shape and colour very uniform. The total length, measured from tips of mandibles to apex of pygidium, varies between 3.8 and 5.4 mm.

Differential diagnosis. The species is similar to *M. (P.) fuscocastanea* Ermisch, 1952 from the Congo (ERMISCH 1967), from which it may be easily distinguished by the antennal length, elytral length and pygidium shape. The diagnostic characters are included in the key to species below.

Etymology. Dedicated to Jana Niedobová who participated, together with Vladimír Hula (both Mendel University, Brno, Czech Republic), in discovery of the species.

Collection circumstances. The specimens from Scant were collected at light trap and swept at night from bushes (J. Hájek, pers. comm.).

Mordellina (Pseudomordellistena) purcharti sp. nov.

(Figs. 22–31)

Type locality. Yemen, Socotra Island, Homhil protected area, ca. 12°34'25"N, 54°18'53"E, 400–510 m.

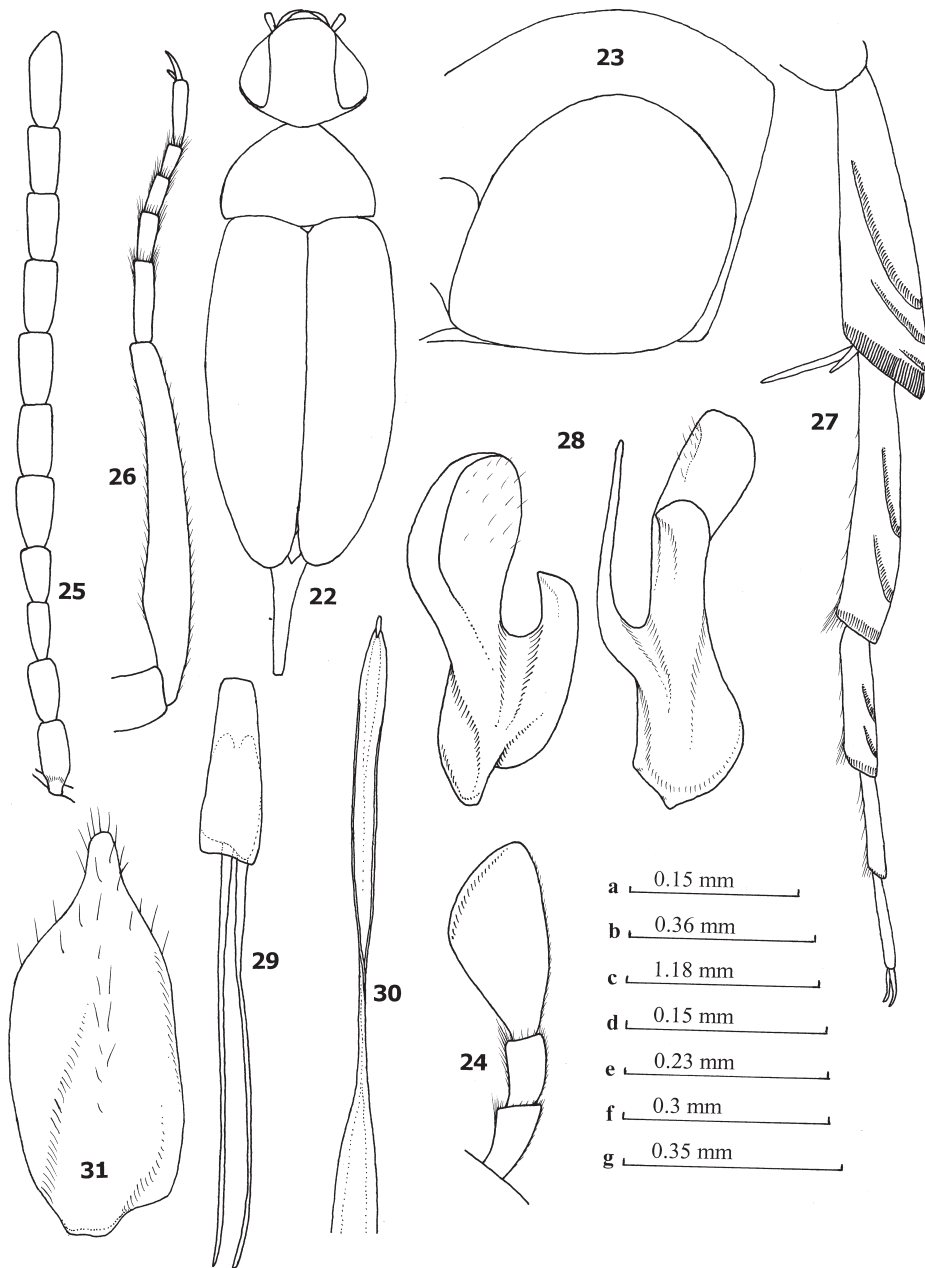
Type material. HOLOTYPE: ♂, Yemen, Socotra Island, Homhil area, 12°34'25"N 54°18'53"E, 400–510 m, at light, 9.–10.ii.2010, L. Purchart & J. Vybíral leg. (NMPC).

Description. Male holotype. Body short, strongly rounded and convex (Fig. 22). Ground colour blackish-brown, only anterior portion of frons, anteclypeus, labrum, mandibles, antennomeres I–III, protibiae and terminal spurs of metatibia yellowish brown.

Body length from tips of mandibles to tips of elytra 3.8 mm, to tip of pygidium 4.7 mm.

Head strongly convex, only slightly wider than long (width to length ratio 7.3 : 7.0) and distinctly narrower than pronotum (ratio of head width to pronotal width 7.0 : 9.0), distinctly prolonged at mouth part. Eyes (Fig. 23) very large, almost circular, occupying almost half of head width (frontal view), only moderately narrowed towards mandibles, very coarsely faceted, with short and sparse setae. Posterior margin behind eyes with very narrow temporal border, temporal angles very small, but distinct. Maxillary palpus (Fig. 24) rather small, palpomere II only moderately wider than palpomere III, terminal palpomere rather shortly securiform, 1.5 times longer than wide, its inner angle situated at midlength. Antennae (Fig. 25) rather long, reaching shoulders, antennomeres I and II almost subequal, antennomere II as long as antennomere IV, antennomere III one fifth shorter and one fourth narrower than antennomere II, antennomere IV indistinctly narrower and one fourth shorter than antennomere V, antennomere V 1.4 times as long as wide, antennomeres V–X gradually slightly diminished, terminal antennomere oblong oval with narrower distal end, twice as long as wide and one third longer than preceding one.

Pronotum moderately convex, wider than long (width to length ratio 9.0 : 7.4), anterior margin with distinct neck-shaped protuberance. Lateral margin of pronotum only moderately



Figs. 22–31. *Mordellina (Pseudomordellistena) purcharti* sp. nov. holotype. 22 – habitus; 23 – eye; 24 – maxillary palpus; 25 – antenna; 26 – protibia and tarsus; 27 – metatibia and tarsus; 28 – paramere; 29 – phallobasis; 30 – apical part of penis; 31 – sternite VIII. Scale: a – 24; b – 27; c – 22; d – 28; e – 29–30; f – 23, 31; g – 25–26.

emarginate, posterior angles nearly rectangular and rounded at tip. Dorsal surface with fine and dense punctation.

Scutellum small, triangular, with rounded apex.

Metepisterna long, three times longer than wide, at base twice as broad as on sternal side, which is truncate.

Elytra strongly rounded, almost twice as long as their combined width at shoulders, separately rounded at tip. Punctation dense and rather coarse, rasp-like.

Pygidium narrowly conical, 2.5 times longer than hypopygium, rather short, reaching third of elytral length.

Protibiae (Fig. 26) distinctly curved inward, with distinct calf-like swelling and without setae at base. Protarsomere I almost as long as two following ones combined, protarsomere IV narrow, almost one third longer than wide, truncate at apex; protarsomere V long, twice as long as tarsomere IV. Mesotibiae distinctly longer than mesotarsi. Metatibiae (Fig. 27) besides short apical ridge reaching one third of tibial width, with two very oblique lateral ridges, upper lateral ridge very long and nearly twice as long as lower one. Metatarsomeres I–II with two very oblique ridges. Outer terminal spur of metatibia reaching one fourth inner one.

Genitalia as in Figs. 28–30, shape of urosternite VIII as in Fig. 31.

Female. Unknown.

Differential diagnosis. The new species is similar to *M. (P.) fuscobrunnea* Ermisch, 1952 from the Congo (ERMISCH 1967), from which it differs in very large and coarsely faceted eyes and in different proportion of terminal antennomere. Diagnostic characters are included in key to species.

Etymology. Dedicated to Luboš Purchart (Mendel University, Brno, Czech Republic), who underwent, along with Jan Vybíral (Brno, Czech Republic), collecting trip to Socotra Island, which led to the discovery of this species.

Mordellina (Pseudomordellistena) stastnyi sp. nov.

(Figs. 32–43)

Type locality. Yemen, Socotra Island, wadi Zerig, ca. 12°29.6'N, 53°59.5'E, 655 m.

Type material. HOLOTYPE: ♂, Yemen, Socotra Isl., Zerik, 25.–27.3.2001, V. Bejček & K. Štátný leg. (NMPC). ALLOTYPE: ♀, same data as holotype (JHCP). PARATYPES: 2 ♂♂ 4 ♀♀, same data as holotype (JHCP); 1 ♂ 4 ♀♀, Yemen, Socotra Isl., Wadi Far, 69 m, 1.4.2001, GPS 12.433N 54.195E, V. Bejček & K. Štátný leg. (JHCP); 2 ♂♂ 12 ♀♀, Yemen, Socotra Isl., Calanthia, 29.–30.3.2001, V. Bejček & K. Štátný leg. (JHCP, BMNH, CULS, NMPC); 4 ♀♀, Yemen, Socotra Isl., Ayhaft, 15.3.2000, V. Bejček & K. Štátný leg. (JHCP); 1 ♀, Yemen, Socotra Isl., Hamadero, 20.11.2000, V. Bejček & K. Štátný leg. (JHCP); 1 ♂ 2 ♀♀, Yemen, Socotra Island E, Homhil area, 12°34'25"N 54°18'53"E, 400–510 m, at light, 9.–10.ii.2010, L. Purchart & J. Vybíral leg. (JHCP); 2 ♂♂ 3 ♀♀, Yemen, Socotra Isl., Zemhon area, 270–300 m, N 12°20.58' E 054°06.39' 16.–17.vi.2010, V. Hula leg. (JHCP); 4 ♀♀, 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. (JHCP).

Description. Male holotype. Body (Fig. 32) slender, sides rather rounded and only moderately convex. Ground colour yellowish-brown, only anteclypeus, entire maxillary palpi, anterior legs, mesotibiae and terminal spurs of metatibia yellow. Pubescence of dorsal surface golden-yellow, without lustre.

Body length from tips of mandibles to tips of elytra 3.3 mm, to tip of pygidium 4.1 mm.

Head rather flatly convex, sparsely punctate, distinctly wider than long (width to length ratio 6.0 : 5.0), distinctly narrower than pronotum (ratio of head width to pronotal width 6.0 : 7.5). Eyes (Fig. 33) large, coarsely faceted, with short and rather dense setae. Temples not developed, only temporal angles moderately distinct. Maxillary palpomeres II–III (Fig. 34) almost equally broad, terminal palpomere securiform with strongly rounded inner angle. Antennae (Fig. 36) of medium length, antennomeres IV and V almost subequal, antennomeres V–X approximately 1.6 times longer than wide, terminal antennomere narrowly oval, twice as long as wide and nearly one third longer than preceding one.

Pronotum flat, widest at basal third, wider than long (width to length ratio 7.5 : 6.0), anterior margin semicircular, with short and distinct neck-shaped protuberance. Lateral margins in lateral view gently emarginate, posterior angles almost rectangular with rounded apex. Punctuation sparse, rasp-like.

Scutellum small, triangular, with dense and rather fine rasp-like punctation, covered with golden-yellow pubescence.

Elytra distinctly convex, rounded at sides, 2.4 times longer than their combined width, separately rounded at apex.

Pygidium narrowly conical, 2.3 times longer than hypopygium and reaching about one third of elytral length.

Protibiae (Fig. 38) straight, with long calf-like swelling and without longer setae at base. Protarsus only indistinctly narrower than protibia. Protarsomere I nearly 1.3 times longer than protarsomere II. Protarsomere IV 2.5 times as long as wide and truncate at apex, terminal protarsomere long and narrow, overlapping it by one third of its length. Mesotarsi distinctly shorter than mesotibiae. Metatibiae (Fig. 39) besides short and rather oblique apical ridge with two very long and oblique lateral ridges, upper ridge longer than lower one. Metatarsomeres I and II with two very oblique ridges, metatarsomere III without ridges. Outer terminal spur of metatibia small, reaching one fourth of inner one.

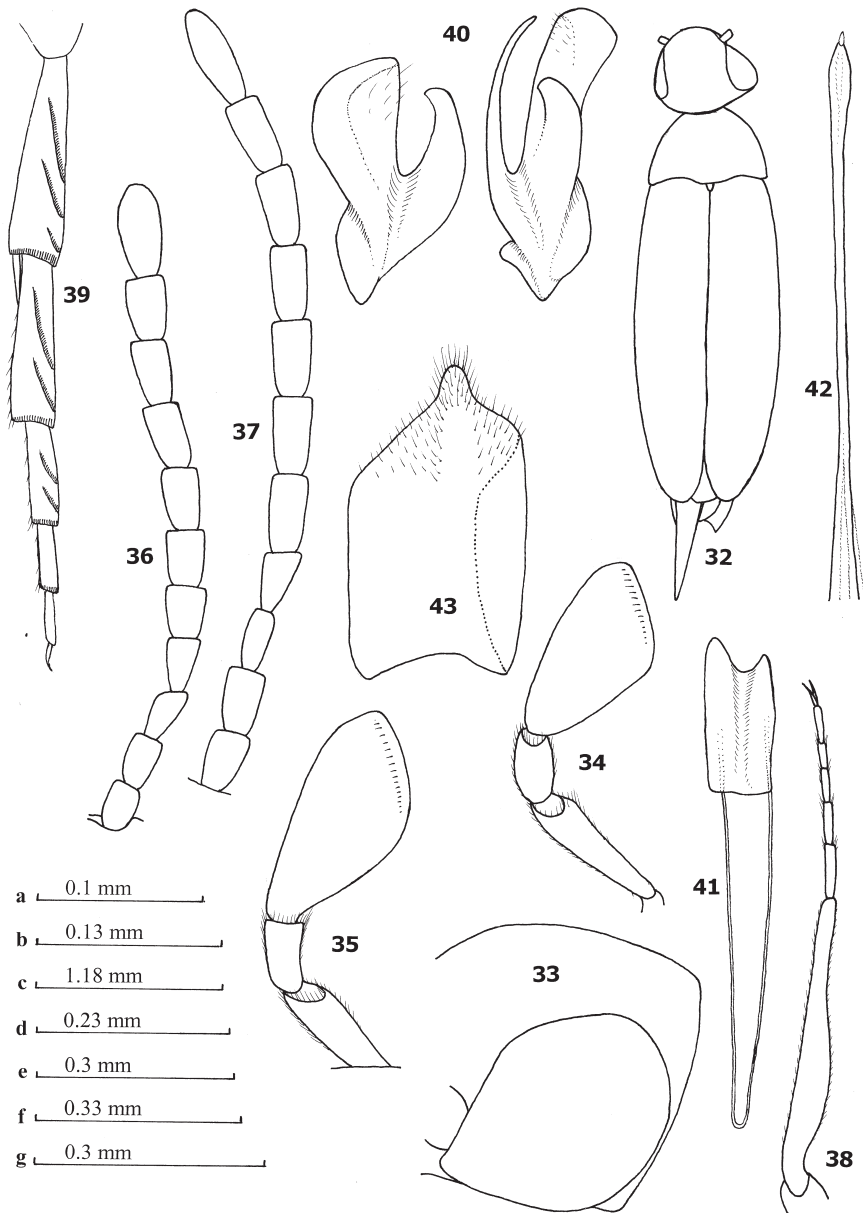
Male genitalia as in Figs. 40–42, shape of urosternite VIII as in Fig. 43.

Female allotype. Female more robust and convex, with strongly arcuate sides. Terminal maxillary palpomere (Fig. 35) with strongly rounded inner angle. Protibia without calf-like swelling and without longer setae at base. Pygidium shorter and broadly conical, only one third longer than hypopygium. Body length from tips of mandibles to tips of elytra 3.7 mm, to tip of pygidium 4.2 mm.

Variability. Body shape and colour uniform. Total length, measured from tips of mandibles to apex of pygidium, varying between 2.8 and 5.3 mm.

Differential diagnosis. The new species is similar to *M. (P.) fuscocastanea* Ermisch, 1952 from the Congo (ERMISCH 1967), from which it is distinguished at first glance by robust body, different proportions of antennomeres and shape of pygidium. Diagnostic characters are included in key to species.

Etymology. New species is dedicated to our teacher and friend Karel Šťastný, who underwent, along with Vladimír Bejček (both Czech University of Life Sciences, Prague, Czech Republic), the research in Socotra Island, which lead to the discovery of this species.



Figs. 32–43. *Mordellina (Pseudomordellistena) stastnyi* sp. nov. 32 – habitus; 33 – eye; 34–35 – maxillary palpus; 36–37 – antenna; 38 – protibia and tarsus; 39 – metatibia and tarsus; 40 – paramere; 41 – phallobasis; 42 – apical part of penis; 43 – sternite VIII. 32–34, 36, 38–42 – holotype (♂); 35, 37 – allotype (♀) Scale: a – 34–35; b – 40; c – 32; d – 39, 41–42; e – 33; f – 36–38; g – 43.

Key to known species of *Mordellina* subg. *Pseudomordellistena* from Socotra Island

- 1(2) Antennomeres IV and V subequal (Fig. 13). Head almost as long as wide, in anterior part strongly prolonged. Frons (Fig. 10) in dorsal view twice as wide as both eyes combined. Elytra 2.9 times as long as their combined width at shoulders (female). Length: 3.8–5.4 mm. *M. (P.) janae* sp. nov.
- 2(1) Antennomere IV almost one third shorter than antennomere V (Figs. 25, 36). Head always wider than long, only moderately prolonged anteriorly. Elytra short, 2.4–2.5 times as long as their combined width at shoulders.
- 3(4) Ground colour dark blackish-brown. Antennae long (Fig. 25), antennomeres IV and V 1.4 times longer than wide. Frons in dorsal view as wide as both eyes combined (Fig. 22). Length: 4.7 mm. *M. (P.) purcharti* sp. nov.
- 4(3) Ground colour yellowish-brown. Antennae short (Fig. 36), antennomeres V and X 1.6 times as long as wide. Frons in dorsal view twice as wide as both eyes combined (Fig. 32). Length: 2.8–5.3 mm. *M. (P.) stastnyi* sp. nov.

***Ermischiella bejceki* sp. nov.**

(Figs. 44–54)

Type locality. Yemen, Socotra Island, Zemhon protected area, ca. 12°20.58'N, 54°06.39'E, 270–300 m.

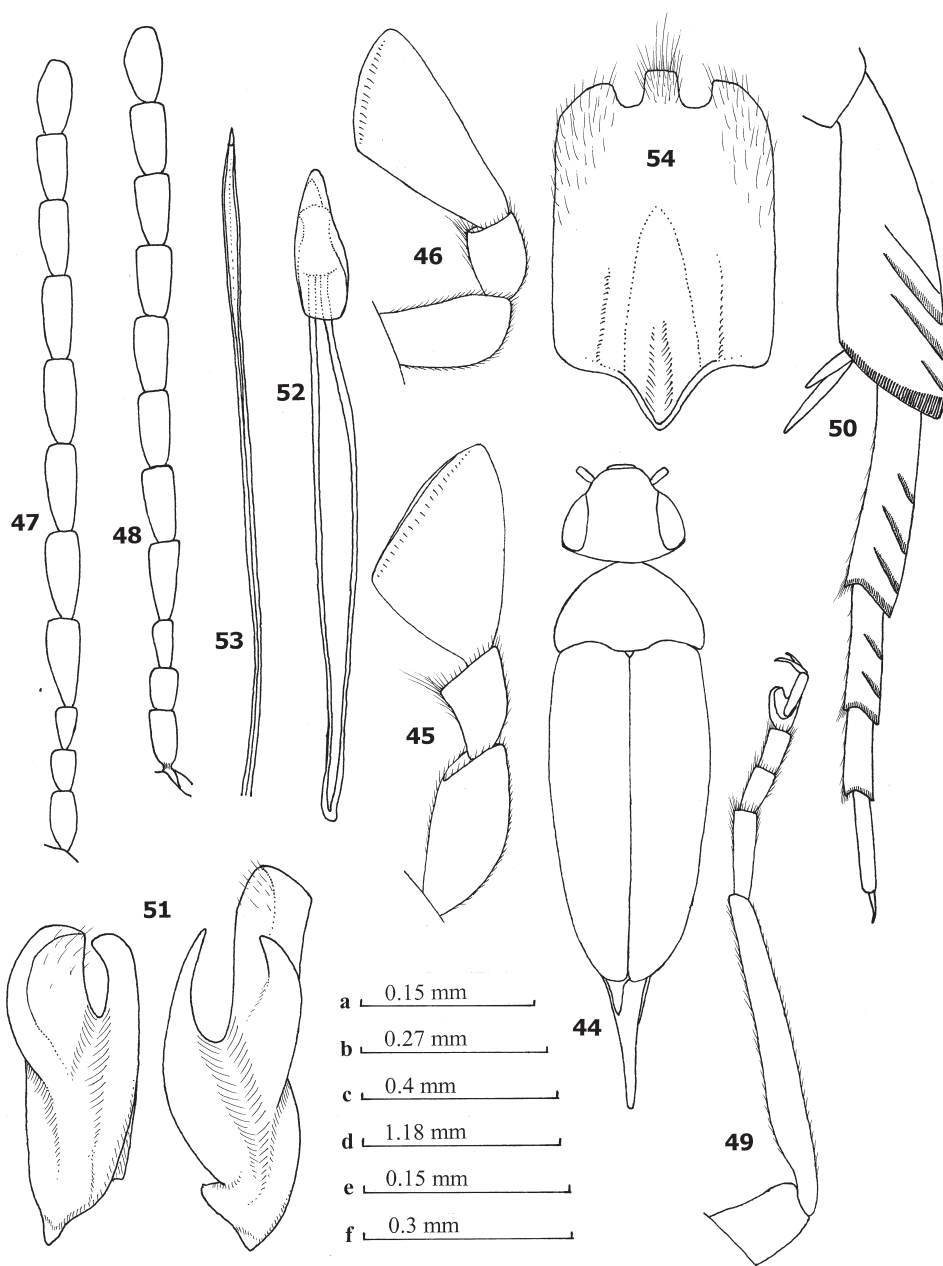
Type material. HOLOTYPE: ♂, Yemen, Socotra Isl., Zemhon area, 270–300 m, N 12°20.58' E 054°06.39' 16.–17.vi.2010, V. Hula leg. (NMPC). ALLOTYPE: ♀, same data as holotype (NMPC). PARATYPES: 4 ♂♂ 3 ♀♀, same data as holotype (JHCP); 1 ♂, Yemen, Socotra Isl., Firmhin plato, 400–500 m, N 12°28'46" E 54°00'89", 18.–19.vi.2010, V. Hula & J. Niedobová leg. (JHCP); 1 ♀, Yemen, Socotra Isl., Wadi Far, 69 m, 1.4.2001, GPS 12.433N 54.195E, V. Bejček & K. Šťastný leg. (JHCP); 2 ♂♂ (one is torso), Yemen, Socotra Isl., Zerik, 25.–27.3.2001, V. Bejček & K. Šťastný leg. (JHCP).

Description. Male holotype. Ground colour yellowish-brown, eyes and ridges of hind legs black. Maxillary palpi, antennomeres I–IV, anterior and mid legs, and terminal spurs of metatibiae yellowish-brown. Pubescence uniform, golden-yellow, with faint silver lustre.

Body length from tips of mandibles to tips of elytra 3.4 mm, to tip of pygidium 4.3 mm.

Head (Fig. 44) rather flatly convex, shining and sparsely punctate; distinctly wider than long (width to length ratio 7.0 : 6.0) and distinctly narrower than pronotum (ratio of head width to pronotal width 7.0 : 8.5). Eyes large, almost globular, coarsely faceted and short and rather densely pubescent. Temples not developed, somewhat extended in area of temporal angle. Maxillary palpi (Fig. 45) rather long, palpomere II clavate, one third wider than palpomere III, which is almost one half longer than wide; terminal palpomere broadly securiform, its inner angle rather shifted toward base and distinctly rounded at top. Antennae (Fig. 47) very long, reaching shoulders; antennomere I one third longer and slightly wider than antennomere II; antennomere III almost equally long and one third narrower than antennomere II; antennomere IV almost twice as long and about one third wider than antennomere III; antennomeres IV and V equal in length; antennomere IV almost three times as long as wide; antennomeres V–X gradually slightly diminished, antennomere X only twice as long as wide; terminal antennomere oblong oval, almost twice as long as wide and only 1.15 times longer than penultimate one.

Pronotum flatly vaulted, wider in posterior third, distinctly wider than long (width to length ratio 8.5 : 6.0). Anterior angles hardly visible from above, anterior margin almost semicircu-



Figs. 44–54. *Ermischiella bejceki* sp. nov. 44 – habitus; 45–46 – maxillary palpus; 47–48 – antenna; 49 – protibia and tarsus; 50 – metatibia and tarsus; 51 – paramere; 52 – phallobasis; 53 – apical part of penis; 54 – sternite VIII. 44 – 45, 47, 49 – 54 – holotype (♂); 46, 48 – allotype (♀). Scale: a – 45–46; b – 49; c – 47–48, 50, 52–53; d – 44; e – 51; f – 54.

lar, with indistinct neck-shaped protuberance. Sides in dorsal view almost straight, posterior angles obtuse with rounded tips. Punctuation sparse, rasp-like.

Scutellum small, triangular, brown with golden-yellow pubescence. Punctuation coarse, rasp-like.

Elytra 2.1 times longer than their combined width, in basal third almost parallel-sided, then gradually narrowed posteriorly, their tips separately rounded. Punctuation coarse, rasp-like.

Pygidium narrowly conical, one third longer than hypopygium.

Protibiae (Fig. 49) only indistinctly curved inward, without swelling and longer setae at base. Protarsomere I almost as long as protarsomeres II–III combined; protarsomere IV moderately wider than protarsomere III, bilobed to basal third and with truncate onychium on ventral side; terminal protarsomere overlapping it almost by two thirds of its length. Mesotibiae longer than mesotarsi. Metatibiae (Fig. 50) besides short apical ridge, with two oblique lateral ridges and above upper lateral ridge with another ridge structurally similar to dorsal ridge. Metatarsomere I with three oblique ridges, metatarsomere II with two oblique ridges, metatarsomere III without ridges. Outer terminal spur of metatibia reaching almost midlength of inner one.

Male genitalia as in Figs. 51–53, shape of urosternite VIII as in Fig. 54.

Female allotype. Larger, more robust and convex, with strongly arcuate sides. Antennae (Fig. 48) shorter and less serrate. Terminal maxillary palpomere (Fig. 46) elongate securiform, its inner angle situated at distal third. Palpomere II narrower than in male. Pygidium widely conical. Metatarsomere I with four ridges. Body length from tips of mandibles to tips of elytra 4.3 mm, to tip of pygidium 4.9 mm.

Variability. Body shape and colour uniform. Total length, measured from tips of mandibles to apex of pygidium, varying between 3.6 and 4.9 mm.

Differential diagnosis. The diagnostic characters are included in the key to species below.

Etymology. The new species is dedicated to our teacher and friend Vladimír Bejček, who underwent, along with Karel Štátný (both Czech University of Life Sciences, Prague, Czech Republic), research in Socotra Island leading to discovery of this species.

Distribution remarks. All hitherto known species of the genus *Ermischiella* occur in the Oriental and eastern Palaearctic Regions. The occurrence of *E. bejceki* sp. nov. in Socotra represents the westernmost limit of the genus range of distribution.

Key to currently known species of the genus *Ermischiella* Franciscolo, 1950

Note. *Glipostenoda hasagawai* Nomura, 1951, currently classified within *Ermischiella* (cf. HORÁK 2008) does not belong to that genus and has to be transferred elsewhere (J. Horák, in prep.). Therefore it is not included in the key.

- 1(2) Metatarsomeres 1–3 with ridges. New Guinea, Guam.
..... *E. papuana* Franciscolo, 1950 and *E. castanea* (Boheman, 1858)
- 2(1) Only metatarsomeres 1–2 with ridges.
- 3(4) Protibiae distinctly curved inward, with distinct calf-like swelling and with longer setae at base. Maxillary palpomere II strongly dilated, twice as wide as palpomere III. Japan (Bonin Is.). *E. nigriceps* Nomura, 1975

- 4(3) Protibiae straight, without swelling and longer setae at base. Palpomere II only indistinctly dilated, almost one half wider than palpomere III.
- 5(8) Antennomere III one half narrower than antennomere II, and only indistinctly narrower than antennomere IV. Metatarsomere I with three ridges.
- 6(7) Palpomere II one half wider than palpomere III. Frons in dorsal view as wide as both eyes combined. Japan (Bonin Is.). *E. chichijimana* Nomura, 1975
- 7(6) Palpomere II almost as wide as palpomere III. Frons in dorsal view five times wider than both eyes combined. China (Fujian). *E. fukiensis* (Ermisch, 1951)
- 8(5) Antennomere III only one fourth narrower than antennomeres II and IV. Metatarsomere I with three to four ridges.
- 9(10) Body entirely black (rarely dark brown), only head yellow. Terminal palpomere in male broadly securiform, 1.6 times longer than wide. Antennomere IV in male twice as long as antennomere III, in female as long as antennomere III. Japan (Bonin Is.). *E. hahajimana* Nomura, 1975
- 10(9) Body yellowish-brown. Terminal palpomere in male narrowly securiform, twice as long as wide. Antennomere IV three times longer than antennomere III, in female twice as long as antennomere III. Yemen (Socotra Is.). *E. bejceki* sp. nov.

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