

## A review of Ptinidae (Coleoptera: Bostrichoidea) of Socotra Island

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**Taxonomy, new genus, new species, new records, Coleoptera, Bostrichoidea, Ptinidae, Anobiinae, Dorcatominae, Eucradinae, Mesocoelopodinae, Xyletinae, Clada, Dermolasia, Lasioderma, Metholbium, Mesotheres, Rhamna, Stagetus, Palaearctic Region, Yemen, Socotra**

**Abstract.** Only seven species of ptinid beetles (Coleoptera: Bostrichoidea: Ptinidae) from the Socotra Island archipelago were known till 2012. Five of them are from the main island of Socotra: *Dignomus mesopotamicus* (Pic, 1894), *Mezium errinaceus* Bellés, 2009, *Ptinus bertranpetiti* Bellés, 2012, *Silisoptinus inermicollis* Bellés, 2005, and *Sphaericus hirsutus* Bellés, 2009; two from smaller islands nearby: *Clada (Clada) forbesii* (Gahan, 1903) and *C. (C.) pohli* Toskina, 2004. Twelve new species from Socotra Island are recorded here, including members of 2 new genera: *Metholbium fulvum* gen. nov., sp. nov., and *Metholbium pseudofulvum* sp. nov. (Anobiinae), *Stagetus bezdeki* sp. nov., *S. farkaci* sp. nov., *S. hajeki* sp. nov., *S. krali* sp. nov. (Dorcatominae), *Clada (Clada) mariae* sp. nov., *C. (C.) stastnybejceki* sp. nov. (Eucradinae), *Mesotheres socotrensis* sp. nov., *Rhamna socotrana* sp. nov. (both Mesocoelopodinae), *Dermolasia pectinicornis* gen. nov., sp. nov., *Lasioderma karlae* sp. nov. (both Xyletinae). Five species previously reported only from neighbouring countries were found there as follows: *Synanobium (Synanobium) angustissimum* (Pic, 1903), *S. (S.) parmatum* (Baudi di Selve, 1874), *Calymmaderus (Calymmaderus) rufescens* (Pic, 1902) (all Dorcatominae), *Clada (Clada) pohli* Toskina, 2004 (Eucradinae), and *Mesocoelopus ingibbosus* Pic, 1924 (Mesocoelopodinae).

### INTRODUCTION

Knowledge of the family Ptinidae of the Socotra Archipelago (Yemen) has still been incomplete. To date, only one species of the subfamily Gibbiinae (*Mezium errinaceus* Bellés, 2009) and four species of the subfamily Ptininae (*Dignomus mesopotamicus* (Pic, 1894), *Ptinus bertranpetiti* Bellés, 2012, *Silisoptinus inermicollis* Bellés, 2005, *Sphaericus hirsutus* Bellés, 2009) have been known from Socotra Island (Bellés 2005, 2009, 2012), and two species from the subfamily Eucradinae were described from adjacent small islands in the archipelago, namely *Clada (Clada) forbesii* (Gahan, 1903) from Abd-el-Kuri Island, and *C. (C.) pohli* Toskina, 2004 from Samha Island (Gahan 1903; Toskina 2004; Wranik, 2003).

Five other species of Ptininae are distributed across the continental part of Yemen, eight species are distributed throughout neighbouring Oman, 31 species are known from Saudi Arabia, eleven species from United Arab Emirates and eleven other species are distributed in nearby Somalia (The Afrotropical Region) (Borowski 2002, 2007; Zahradník 2007) (see tab. 1). Information about fauna from most of these countries is fragmentary, but this is not the case with the fauna from Saudi Arabia (Español 1979, 1981; Toskina 1998) and the United Arabian Emirates (Zahradník 2009) which was recently appropriately treated. Basic information about Socotra Archipelago was published by Batelka (2012).

Tab. 1. List of Ptinidae of Socotra Island and neighbouring countries.

Species	YE		SA	OM	UA	SO
	S	C				
<b>Anobiinae</b>						
<i>Gastrallus arabicus</i> Zahradník, 2007					X	
<i>Gastrallus subtilis</i> Toskina, 1998			X			
<i>Metholbium fulvum</i> sp. nov.	X					
<i>Metholbium pseudofulvum</i> sp. nov.	X					
<i>Stegobium paniceum</i> (Linnaeus, 1758)					X	
<b>Dorcatominae</b>						
<i>Calymmaderus (Calymmaderus) rufescens</i> (Pic, 1902)	X					
<i>Stagetodes breviscullus</i> (Fairmaire, 1886)			X			X
<i>Stagetus arabicus</i> Español, 1981			X			
<i>Stagetus bezdeki</i> sp. nov.	X					
<i>Stagetus farkaci</i> sp. nov.	X					
<i>Stagetus ferrugineus</i> Español, 1969			X			
<i>Stagetus hajeki</i> sp. nov.	X					
<i>Stagetus krali</i> sp. nov.	X					
<i>Stagetus madoni</i> (Pic, 1932)			X		X	X
<i>Stagetus montanus</i> Toskina, 1998			X	X		
<i>Stagetus pellitus</i> (Chevrolat, 1859)			X		X	
<i>Synanobium (Synanobium) angustissimus</i> (Pic, 1903)	X		X			X
<i>Synanobium (Synanobium) parmatum</i> (Baudi di Selve, 1874)	X					
<b>Eucradinae</b>						
<i>Clada (Clada) denticornis</i> (Castelnau, 1840)						X
<i>Clada (Clada) forbesii</i> (Gahan, 1903)	X <sup>1)</sup>					
<i>Clada (Clada) mariae</i> sp. nov.	X					
<i>Clada (Clada) pallidior</i> Español, 1969						X
<i>Clada (Clada) pohli</i> Toskina, 2004	X <sup>2)</sup>					
<i>Clada (Clada) sarracena</i> Español, 1979			X			
<i>Clada (Clada) stastnybejceki</i> sp. nov.	X					
<i>Hedobia unicolor</i> Pic, 1897			X			
<b>Gibbiinae</b>						
<i>Gibbium aequinoctiale</i> Boieldieu, 1854		X				
<i>Gibbium psylloides</i> (Czempinski, 1778)			X			
<i>Mezium errinaceus</i> Bellés, 2009	X					

<b>Mesocoelopodinae</b>						
<i>Mesocoelopus arabicus</i> Zahradnik, 2007					X	
<i>Mesocoelopus buettikeri</i> Español, 1981			X	X		
<i>Mesocoelopus gallagheri</i> Toskina, 1998				X		
<i>Mesocoelopus ingibbosus</i> Pic, 1924	X	X	X	X	X	
<i>Mesocoelopus rufescens</i> Pic, 1927						X
<i>Mesocoelopus substriatus</i> Schilsky, 1900			X			
<i>Mesothes socotrensis</i> sp. nov.	X					
<i>Microcoelopus arabicus</i> Toskina, 1998			X			
<i>Microcoelopus crassicornis</i> Toskina, 1998			X			
<i>Microcoelopus curtus</i> Toskina, 1998			X			
<i>Microcoelopus productus</i> Toskina, 1998			X			
<i>Microcoelopus raripilosus</i> Toskina, 1998			X		X	
<i>Microcoelopus talhouki</i> Toskina, 1998			X			
<i>Microcoelopus tenebrosus</i> Toskina, 1998			X			
<i>Rhamna saudita</i> Español, 1981			X			
<i>Rhamna socotrana</i> sp. nov.	X					
<b>Ptininae</b>						
<i>Dignomus chiaromonte</i> (Pic, 1927)						X
<i>Dignomus fairmairei</i> (Pic, 1895)		X				
<i>Dignomus mesopotamicus</i> (Pic, 1894)	X		X			
<i>Dignomus omanensis</i> Borowski, 2000				X		
<i>Dignomus pulverulentus</i> (Boieldieu, 1854)		X				
<i>Dignomus robustus</i> (Pic, 1941)						X
<i>Dignomus urbanus</i> Borowski, 1999			X			
<i>Niptodes hirsutus</i> Pic, 1926						X
<i>Ptinus (Ptinus) raspolii</i> Pic, 1899						X
<i>Ptinus bertranpetiti</i> Bellés, 2012	X					
<i>Silisoptinus hirsutus</i> Bellés, 2009	X					
<i>Sphaericus hirsutus</i> Bellés, 2009	X					
<b>Xyletininae</b>						
<i>Dermolasia pectinicornis</i> sp. nov.	X					
<i>Lasioderma bubalus</i> Fairmaire, 1860			X			
<i>Lasioderma buettikeri</i> Toskina, 1998			X			
<i>Lasioderma gallagheri</i> Toskina, 1998				X		
<i>Lasioderma impexum</i> Toskina, 1998			X			

<i>Lasioderma karlae</i> sp. nov.	X					
<i>Lasioderma pusillum</i> Español, 1979			X			
<i>Lasioderma serricorne</i> (Fabricius, 1792)			X			
<i>Lasioderma splendidum</i> Toskina, 1998				X		
<i>Lasioderma tenebricum</i> Toskina, 1998				X		
<i>Metholcus arabicus</i> Zahradník, 2007					X	
<i>Metholcus buettikeri</i> Toskina, 1998					X	
<i>Metholcus phoenicis</i> (Fairmaire, 1859)						X
<i>Xyletinus (Calypterus) bucephalus</i> (Illiger, 1907)			X	X	X	
<i>Xyletinus (Calypterus) materliki</i> Toskina, 2002		X				
<i>Xyletinus (Calypterus) vanharteni</i> Zahradník, 2007					X	
<i>Xyletinus (Xeronthobius) bucephaloides</i> Reitter, 1901	X		X			

YE - Yemen, S - Socotra Island, C - continental Yemen, <sup>1)</sup> - only on Abd-el-Kuri, <sup>2)</sup> - from Samha I. and Socotra I.; SA - Saudi Arabia; OM - Oman; UA - United Arabian Emirates; SO – Somalia.

## MATERIAL AND METHODS

The sex of all of the specimens was determined by the dissection. Male genitalia were mounted and stuck with disperse glue on the same label as the beetle.

The materials from The Socotra Archipelago (Yemen) came from expeditions organized by the Czech University of Life Sciences, Prague, Czech Republic and Mendel University, Brno, Czech Republic between 1999 - 2012 and also partly from private collections. Subfamilies, tribes and genera are cited in the usual order.

Information about names of localities and their characteristics were published by Bezděk et al (2012).

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

- CULS Česká zemědělská univerzita, Fakulta lesnická a dřevařská, Praha, Czech Republic;
- IRSN Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium (Pol Limbourgh);
- NMPC Národní museum, Praha, Czech Republic (Jiří Hájek);
- PLFG Pietro Lo Cascio and Flavia Gritta collection, Lipari, Messina, Italy;
- PZPC Petr Zahradník private collection, Jesenice u Prahy, Czech Republic.

## SYSTEMATICS

### **Eucradinae LeConte, 1861 Hedobiini White, 1982**

#### ***Clada (Clada) pohli* Toskina, 2004 (Fig. 1)**

**Material examined.** Socotra Island (Yemen), Neet, x.2000, V. Bejček & K. Šťastný leg., 1 ♂ (PZPC); Socotra Island (Yemen), Noged Plain (sand dunes), Sharet Halma vill. env., 12° 21.9' N, 54° 05.3' E, 20 m a. s. l., 10.-11. xi.2010, J. Batelka leg., 1 ♀ (NMPC); Samha Island (Yemen), 27.ii.2009, P. Lo Cascio & F. Grita leg., 3 ♂♂ (PLFG).

#### ***Clada (Clada) mariae* sp. nov. (Figs. 2, 18a,b)**

**Type material.** Holotype (♂): Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Bezděk leg. (NMPC). Paratypes. (1 ♀): Socotra Island (Yemen), Noged Plain (sand dunes), Sharet Halma vill. env., 12° 21.9' N, 54° 05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Batelka leg., (NMPC); (1 ♂, 1 ♀): Socotra Island (Yemen), Calanthia, 29.-30.iii.2001, V. Bejček & K. Šťastný leg., (PZPC); (1 ♂, 3 ♀♀): Socotra Island (Yemen), Homhil, Hamaderon, 20.-21.xi.2000, V. Bejček & K. Šťastný leg., (PZPC); (1 ♀): Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Hájek leg., (NMPC); (4 ♂♂, 1 ♀): Socotra Island (Yemen), Shuab env. (cca 3 km NE), sand dunes, 12° 34.1' N, 53° 23.9' E, 3 m a. s. l., 20.-21.vi.2012, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niebodová & L. Purchart leg., (NMPC); (1 ♂): Socotra Island (Yemen), Wadi Faar, 1.iv.2001, V. Bejček & K. Šťastný leg., (PZPC); (11 ♂♂, 1 ♀): Socotra Island (Yemen), Wadi Diffarao, south side, 15.i.2010, A. Saldaitis & I.G.Saldaitis leg., (IRSN).

**Description.** Male (holotype). Elongate-elliptical, transversally convex; body length 7.7 mm, maximum width 3.0 mm. Ratio length:width of elytra 1.75. Head, body, pronotum, scutellum, elytra, antennae, palpi and legs light brown in colour. Pubescence of dorsal surface light, yellow-silverish, of ventral surface silverish.

Head moderately shining, densely, coarsely, umbilicate-punctate, with long, recumbent or semierect, dense pubescence, with sparse long erect setae, on clypeus and frons inclined forward, on vertex are arranged in circular, inclined in centre and erect sparse setae on sides inclined forward. Frons with transverse depression, vertex with rounded, very shallow, almost invisible depression in centre. Clypeus with transverse depression. Eyes large, globular with long erect sparse pubescence of same length or longer than on head. Frons wide, as wide as two diameters of the eye. Antennae inserted in front of eyes on large socket. Antennae consisting of eleven antennomeres III-X serrate. Antennomere I robust, antennomere II smaller, 1.6 times longer than wide; antennomeres III-X twice as long as wide. Apical antennomere longest, 1.6 times longer than previous antennomeres and more than four times longer than wide, with small lateral emargination outside apex (Fig. 18b). Apical maxillary palpomere long, spindleform.

Pronotum convex, moderately shining, rounded, moderately transverse (ratio length:width of pronotum 0.85), widest at middle. Base of pronotum finely bordered. Middle of



1



2



3



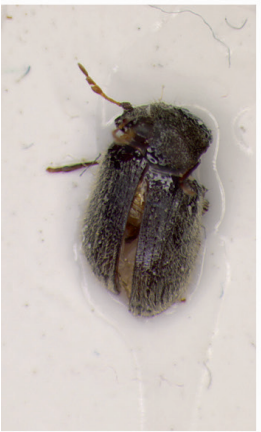
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16



17

Figs. 1- 17: 1 - *Clada (Clada) pohli* Toskina, 2004; 2 - *Clada (Clada) mariae* sp. nov.; 3 - *Clada (Clada) stastnybejceki* sp. nov.; 4 - *Stagetus bezdeki* sp. nov.; 5 - *Stagetus krali* sp. nov.; 6 - *Stagetus farkaci* sp. nov.; 7 - *Stagetus hajeki* sp. nov.; 8 - *Synanobium (Synanobium) angustissimus* (Pic, 1903); 9 - *Synanobium (Synanobium) parmatum* (Baudi di Selve, 1874); 10 - *Calymmaderus (Calymmaderus) rufescens* (Pic, 1902); 11 - *Mesocoelopus ingibbosus* Pic, 1924; 12 - *Mesotheres socotrensis* sp. nov.; 13 - *Rhamna socotrana* sp. nov.; 14 - *Dermolasia pectinicornis* gen. nov., sp. nov.; 15 - *Lasioderma karlae* sp. nov.; 16 - *Metholbium fulvum* gen. nov., sp. nov.; 17 - *Metholbium pseudofulvum* sp. nov.

pronotum at base with bump, in anterior part wider than posteriorly; on sides of this bump with very slightly rounded depression. Surface of pronotum coarsely, densely, umbilicate-punctate; the distance between punctures smaller than their diameter. Pubescence long, semierect or erect (especially on pronotal margins), in middle inclined to the top of bump, in other parts inclined forward.

Scutellum a little longer than wide, almost rectangular, backward moderately narrowly, surface with dense, long, recumbent pubescence.

Elytra oval, transversally convex, moderately shining, with distinct shoulders. Surface of elytra coarsely and sparsely, umbilicate-punctate, without costae. Diameter of punctures greater than distance between them. Pubescence double, consisting of recumbent, dense, long, almost backward inclined setae, and erect, less dense, long backward inclined setae.

Legs stout, with longly densely erect pubescence, their surface coarsely, densely punctate. Tarsi longer than tibia; tarsomere I slightly longer tarsomere II, tarsomeres III and IV of the same length, longer than wide, tarsomere V long, of the same length as tarsomere II.

Aedeagus see Fig. 18a.

Female. Antennomeres shorter, antennomeres IX-X only 1.5 times longer than wide, ultimate antennomere 1.2 times longer than penultimate and 1.9 times longer than wide.

**Variability.** Body length 5.9-7.8 mm, width 2.6-3.0 mm.

**Differential diagnosis.** The species is very similar to other species of the genus *Clada* Pascoe, 1887. *Clada* (*C.*) *forbesii* Gahan, 1903 has rounded pronotum and different shape of antennomeres, *Clada* (*C.*) *sarracena* Español, 1979 (from Saudi Arabia) has pectiniform antennae, and other species with “yellow” colour of elytra differ by the shape of antennomeres and aedeagus.

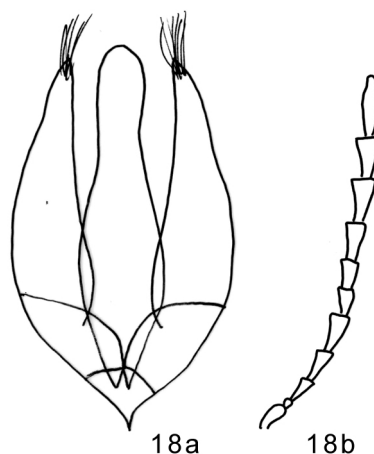
**Collection circumstances.** The new species was collected at the sand dunes locality with *Avicennia marina* mangrove.

**Etymology.** Dedicated to my wife Marie.

***Clada* (*Clada*) *stastnybejceki* sp. nov.**

(Figs. 3, 19a,b)

**Type material.** Holotype (♂): Socotra Island (Yemen), Homhil, Hamaderon, 20.-21.xi.2000, V. Bejček & K. Šťastný leg. (PZPC). Paratypes. (3 ♂♂): Socotra Island (Yemen), Calanthia, 29.-30.iii.2001, V. Bejček & K. Šťastný leg., (PZPC); (7 ♂♂): Socotra Island (Yemen), Homhil, Hamaderon, 20.-21.xi.2000, V. Bejček & K. Šťastný leg., (2 PZPC), (2 NMPC), (3 CULS); (1 ♂): Socotra Island (Yemen), Khayrha mts., Qalanshiyah env., 12°38'50" N, 53°12'39" E, 85 - 592 m a. s. l., 9.-10.xii.2003, J. Farkač leg., (CULS); (5 ♂♂): Socotra Island (Yemen), Neet,



Figs. 18: *Clada* (*Clada*) *mariae* sp. nov.: a- aedeagus; b- antenna.



x.2000, V. Bejček & K. Šťastný leg., (CULS); (2 ♂♂): Socotra Island (Yemen), Shoab, 10.iii.2000, V. Bejček & K. Šťastný leg., (PZPC); (5 ♂♂): Socotra Island (Yemen), Wadi Faar, 1.iv.2001, V. Bejček & K. Šťastný leg., (3 PZPC), (2 CULS).

**Description.** Male (holotype). Elongate-elliptical, transversally convex; body length 5.9 mm, maximum width 2.5 mm. Ratio length:width of elytra 1.6. Head, body, pronotum, scutellum, elytra, antennae, palpi and legs light brown in colour. Pubescence of ventral and dorsal surfaces light, yellow-silverish.

Head moderately shining, densely, coarsely, umbilicate-punctate, with short, recumbent, sparse pubescence, with sparse, long, erect setae, inclined forward. Frons with transverse depression. Clypeus with transverse depression. Eyes large, globular with long, erect, sparse pubescence, shorter than on head. Frons wide, as wide as two diameters of the eye. Antennae inserted in front of eyes on large sockets. Antennae consist of eleven antennomeres, slightly serrate in antennomere III-X. Antennomere I robust; antennomere II smaller, 1.6 times longer than wide; antennomeres III-X twice as long as wide, almost parallel, widened apically. Antennomere XI longest, 1.7 times longer than previous and more than four times longer than wide, without lateral emargination outside apex (Fig. 19b). Apical maxillary palpomere long, spindleform.

Pronotum convex, moderately shining, rounded, moderately transverse (the ratio length:width of pronotum 0.85), widest at middle. Base of pronotum with fine border. Middle of pronotum at base with bump, in anterior part wider than posteriorly; on the sides of this bump with very slightly rounded depression. Surface of pronotum very coarsely, densely, umbilicate-punctate; distance between punctures smaller than their diameter. Pubescence long, semierect or erect, in middle area inclined to the top of bump, in other parts inclined forward.

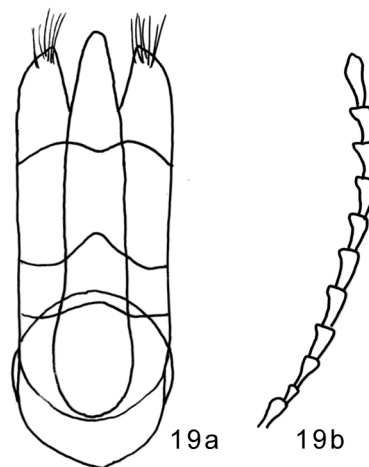
Scutellum a little longer than wide, triangular, its surface almost without setation.

Elytra oval, transversely convex, moderately shining, with distinct shoulders. Surface of elytra very coarsely, sparsely, umbilicate-punctate, without costae. Diameter of punctures greater than distance between them. Pubescence double, consisting of recumbent, sparse, short, almost backward inclined setae, and erect, dense, long, backward inclined setae.

Legs stout with long, dense, erect pubescence; their surface coarsely, densely punctate. Tarsi longer than tibia; tarsomere I slightly longer than tarsomere II; tarsomeres III-IV equal, longer than wide; tarsomere V long, as long as tarsomere II.

Aedeagus as in Fig. 19a.

Female. Unknown.



Figs. 19: *Clada (Clada) stastnybejceki* sp. nov.: a- aedeagus; b- antenna.

**Variability.** Body length 4.2-6.1 mm, width 1.5-2.5 mm.

**Differential diagnosis.** The species is very similar to other species of the genus *Clada* Pascoe, 1887. *Clada* (*C.*) *forbesii* Gahan, 1903 has a rounder pronotum and a different shape of antennomeres; *Clada* (*C.*) *sarracena* Español, 1979 has pectiniform antennae, and other species with “yellow” colour of elytra differ by the shape of their antennomeres and aedeagus.

**Etymology.** Dedicated to the first two collectors of this species and my friends - Karel Šťastný and Vladimír Bejček.

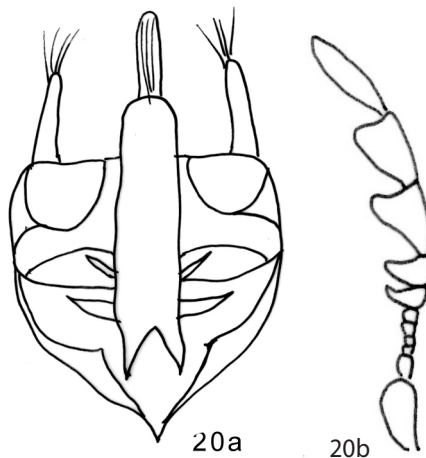
**Dorcatominae C. G. Thomson, 1859**  
**Prothecini White, 1982**

***Stagetus bezdeki* sp. nov.**  
(Figs. 4, 20a,b)

**Type material.** Holotype (♂): Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Bezděk leg., (NMPC). Paratypes. (1 ♂, 4 ♀♀): Socotra Island (Yemen), Dixam plateau, Firmihin (*Dracaena* forest), 12°28.6' N, 54°01.1' E, 490 m a. s. l., 15.-16.xi.2010, J. Bezděk leg., (3 NMPC), (1 PZPC); (1 ♀): Socotra Island (Yemen), Dixam plateau, Wadi Esgego, 12°28'09" N, 54°00'36" E, 300 m a. s. l., 2.-3.xii.2003, J. Farkač leg., (NMPC); (1 ♀): Socotra Island (Yemen), Dixam plateau, Wadi Esgego, 12°28'09" N, 54°00'36" E, 300 m a. s. l., 2.-3.xii.2003, D. Král leg., (NMPC); (1 ♀): Socotra Island (Yemen), Homhil, 23.-24.ii.2009, P. Lo Cascio & F. Grita leg., (PLFG); 3 ♂, 2 ♀: Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Bezděk leg., (2 NMPC), (3 PZPC); (1 ♂): Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Hájek leg., (NMPC).

**Description.** Male (holotype). Shortly oval, convex; body length 1.8 mm, maximum width 1.1 mm. Ratio length:width of elytra 1.2. Dark brown, pubescence white. Antennae, palpi and legs yellowish brown in colour.

Head evenly convex with small bump on frons; matt, coarsely and densely punctate. Pubescence long, sparse, erect, inclined forwards on clypeus; inclined backwards on frons and vertex. Eyes small, round and flattened with sparse, short, erect pubescence. Antennae consist of eleven antennomeres; antennomeres III-IV square, as long as wide, antennomeres V-VI slightly serrate, almost as long as wide, antennomeres VII-VIII serrate, longer than wide. Apical three antennomeres enlarged, 1.5 times longer than wide, their combined length greater than combined length of antennomeres II-VIII (Fig. 20b). All antennomeres with dense recumbent pubescence with sparse erect setae.



Figs. 20: *Stagetus bezdeki* sp. nov.: a- aedeagus; b- antenna.

Pronotum convex, shining-matt, with double punctuation - the first very fine and dense, the second coarse, sparse, umbilicate; diameter of puncture approximately the same as distance between punctures. Pubescence long, dense, erect or semierect, irregular, but almost inclined forward. Posterior margin distinctly bisinuate.

Scutelum triangular, twice as wide as long.

Elytra shining-matt, with distinct shoulders; beside of scutellum with short, fine furrow. Each elytron have ten punctured striae which are 2-3 times narrower than intervals between them. Striae deep, especially on side of elytra, compressing coarse oval punctures which are better visible on sides of elytra. Intervals between striae very dense and finely punctate. Pubescence of elytra double, consistent with very short and recumbent setae and long, sparse and erected setae.

Aedeagus as in Fig. 20a.

Female. Without visible sexual dimorphism.

**Variability.** Body length 1.7-1.9 mm, width 1.1 mm.

**Differential diagnosis.** The species differs from other species of the group “*byrrhoides*” (with distinct shoulders) by short erect setae on eyes, finer striae on elytra, and especially by the shape of the aedeagus.

**Etymology.** Dedicated to my friend Jan Bezděk, a well-known specialist in the family Chrysomelidae, Coleoptera and collector of part of the type series of this species.

***Stagetus krali* sp. nov.**

(Figs. 5, 21)

**Type material.** Holotype (♂): Socotra Island (Yemen), Dixam plateau, Wadi Esgego, 12°28'09" N, 54°00'36" E, 2.-3.xii.2003, 300 m a. s. l., D. Král leg., (PZPC).

**Description.** Male (holotype). Shortly oval, convex; body length 1.6 mm, maximum width 1.0 mm. Ratio length:width of elytra 1.1. Dark brown, head evenly lighter, pubescence white. Antennae, palpi and legs yellowish brown.

Head evenly convex with small bump on frons, shining, coarsely and densely punctate. Pubescence long, sparse, recumbent, inclined forwards on clypeus. Eyes small, round and flattened. Antennae consisting of eleven antennomeres; antennomere V-VI slightly serrate, as long as wide; antennomere VII-VIII serrate, strongly transverse. Apical three antennomeres enlarged, 1.5 times longer than wide, their combined length greater than combined length of antennomeres II-VIII. All antennomeres with dense recumbent pubescence with sparse erect setae.



Figs. 21: *Stagetus krali* sp. nov.: aedeagus.

Pronotum convex, shining, with double punctuation - the first very fine and dense, the second very coarse, sparse, umbilicate; diameter of puncture approximately the same as distance between punctures. Pubescence long, dense, recumbent or slightly semierect, inclined forward. Posterior margin distinctly bisinuate.

Scutellum triangular, 1.6 times longer than wide.

Elytra shining, with distinct shoulders. Beside of scutellum with short fine furrow. Each elytron with ten punctured striae, which are twice narrower than intervals between them. Striae deep, especially on side of elytra, compressing coarse oval punctures, which are better visible on sides of elytra. Intervals between striae very densely and finely punctate. Pubescence double, consisting of short and recumbent backwards inclined setae, and long, very sparse and erect backwards inclined setae.

Aedeagus as in Fig. 21.

Female. Unknown.

**Differential diagnosis.** This species differs from other species of the group “*byrrhoides*” (with distinct shoulders) especially by its finer striae of elytra, and the shape of the aedeagus.

**Etymology.** Dedicated to the collector of the type material and my friend David Král, a well-known specialist in Scarabaeidae (Coleoptera).

*Stagetus farkaci* sp. nov.

(Figs. 6, 22)

**Type material.** Holotype (♂): Socotra Island (Yemen), Zerik, 25.-27.iii.2001, V. Bejček & K. Šťastný leg., (PZPC).

**Description.** Male (holotype). Shortly oval, convex; body length 2.2 mm, maximum width 1.4 mm. Ratio length:width of elytra 1.1. Dark brown, pubescence white. Antennae, palpi and legs reddish brown.

Head evenly convex with small bump on frons, shining-matt, coarsely and densely punctate. Pubescence long, sparse, erect, inclined forwards on the clypeus, inclined backwards on frons and vertex. Eyes small, round and flattened. Antennae consisting of eleven antennomeres; antennomeres V-VI slightly serrate, as long as wide; antennomeres VII-VIII serrate, strongly transverse. Apical three antennomeres enlarged, 1.5 times longer than wide, their combined length greater than combined length of antennomeres II-VIII. All antennomeres with dense recumbent pubescence with sparse erect setae.

Pronotum convex, shining-matt, with double punctuation - the first very fine and dense, the second coarse, sparse, umbilicate; diameter of puncture approximately smaller than distance between punctures. Pubescence long, dense, erect or semierect, inclined forward. Posterior margin distinctly bisinuate.



Figs. 22: *Stagetus farkaci* sp. nov.: aedeagus.

Scutelum triangular, twice as wide as long.

Elytra shining, with distinct shoulders. Beside of scutellum with short fine furrow. Each elytron with ten punctured striae; which are three times narrower than intervals between them. Striae deep, especially on side of elytra, compressing coarse oval punctures, which are better visible on sides of elytra. Intervals between striae very densely and finely punctate. Pubescence double, consisting of short and recumbent backwards inclined setae, and long, sparse, erect, slightly backwards inclined setae.

Aedeagus see Fig. 22.

Female. Unknown.

**Differential diagnosis.** The species differs from other species of the group “*byrrhoides*” (with distinct shoulders) especially by the shape of the aedeagus.

**Etymology.** Dedicated to my friend Jan Farkač, a well-known specialist in Carabidae (Coleoptera), and participant of the Socotra expedition.

***Stagetus hajeki* sp. nov.**

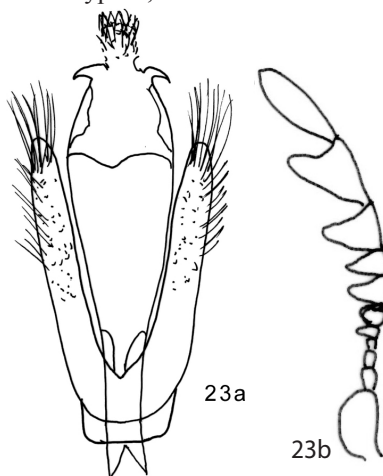
(Figs. 7, 23a,b)

**Type material.** Holotype (♂): Socotra Island (Yemen), Dixam plateau, Firmihin (*Dracaena* forests), 12°28.6' N, 54°01.1' E, 490 m a. s. l., 15.-16.xi.2010, J. Hájek leg., (NMPC).

**Description.** Male (holotype). Shortly oval, convex; body length 2.9 mm, maximum width 1.3 mm. Ratio length:width of elytra 1.3. Dark brown, pubescence white. Antennae, palpi and legs reddish brown.

Head evenly convex with small bump on frons, matt, coarsely and densely punctate. Pubescence long, sparse, erect, inclined forwards on clypeus, inclined backwards on frons and vertex. Eyes small, round and flattened, with sparse, short, erect pubescence. Antennae consisting of eleven antennomeres, antennomere II longer than wide, antennomere III square as long as wide, antennomere III shorter than previous ones, antennomeres V-VI slightly serrate, slightly shorter than wide, antennomere VII-VIII serrate, slightly transverse. Apical three antennomeres enlarged, 1.5 times longer than wide, their combined length greater than combined length of antennomeres II-VIII (Fig. 23b). All antennomeres with dense recumbent pubescence with sparse erect setae.

Pronotum convex, shining-matt, with double punctuation - the first very fine and dense, the second coarse, sparse, umbilicate; diameter of puncture approximately the same as distance



Figs. 24: *Mesotheres socotrensis* sp. nov.: a- aedeagus; b- apical maxillary palpomere.

between punctures. Pubescence long, sparse, erect or semierect, irregular, but mostly inclined forward. Posterior margin distinctly bisinuate.

Scutelum triangular, twice as wide as long.

Elytra matt, with distinct shoulders. Beside of scutellum with short fine furrow. Each elytron with ten punctured striae; which are four times narrower than intervals between them. Striae deep, especially on side of elytra, compressing coarse oval punctures, which are better visible on sides of elytra. Intervals between striae very densely and finely punctate. Pubescence of elytra double, consisting of shorter, dense, recumbent backwards inclined setae, and longer, sparse, erect backwards inclined setae.

Aedeagus as in Fig. 23a.

Female. Unknown.

**Differential diagnosis.** The species differs from other species of the group “byrrhoides” (with distinct shoulders) especially by the shape of the aedeagus.

**Etymology.** Dedicated to the collector of the type material and my friend Jiří Hájek, a well-known specialist in Dytiscidae (Coleoptera).

#### Petaliini White, 1982

##### *Synanobium (Synanobium) angustissimum* (Pic, 1903)

(Fig. 8)

**Examined material.** Socotra Island (Yemen), Noged plain, Qaareh (water fall), 12°20'10" N, 53°37'56" E, 57 m a. s. l., J. Farkač leg., 1 ♀ (NMPC).

**Distribution.** Djibouti, Saudi Arabia, Somalia. First record from the Socotra Island.

##### *Synanobium (Synanobium) parmatum* (Baudi di Selve, 1874)

(Fig. 9)

**Examined material.** Socotra Island (Yemen), Wadi Faar, 1.iv.2001, V. Bejček & K. Šťastný leg., 1 ♀ (PZPC).

**Distribution.** Cyprus, Egypt, Israel, Ivory Coast (?), Lebanon, Syria. First record from the Socotra Island.

#### Calymmaderini White, 1982

##### *Calymmaderus (Calymmaderus) rufescens* (Pic, 1902)

(Fig. 10)

**Material examined.** Socotra Island (Yemen), Al Haghier Mts., Scant Mt. env., 12°34.6' N, 54°01.5' E, 1450 m a. s. l., 12.-13.xi.2010, J. Bezděk leg., 1 spec. (NMPC); Socotra Island (Yemen), Al Haghier Mts., Scant Mt. env., 12°34.6' N, 54°01.5' E, 1450 m a. s. l., 12.-13.xi.2010, L. Purchart leg., 2 spec. (NMPC 1 spec., PZPC 1 spec.).

**Distribution.** Brazil. First record from the Socotra Island (introduced species).



**Mesocoelopodinae Mulsant et Rey, 1864**  
**Mesocoelopodini Mulsant et Rey, 1864**

***Mesocoelopus ingibbosus* Pic, 1924**

(Fig. 11)

**Material examined.** Socotra Island (Yemen), Dixam plateau, Firmihin (*Dracaena* forests), 12°28.6' N, 54°01.1' E, 490 m a. s. l., 15.-16.xi.2010, L. Purchart leg., 1 ♂ (NMPC); Socotra Island (Yemen), Dixam plateau, Wadi Esgego, 12°28'09" N, 54°00'36" E, 300 m a. s. l., 2.-3.xii.2003, J. Farkač leg., 2 ♂♂ (PZPC); Socotra Island (Yemen), Dixam plateau, Wadi Esgego, 12°28'09" N, 54°00'36" E, 300 m a. s. l., 2.-3.xii.2003, P. Kabátek leg., 1 spec. (PZPC); Socotra Island (Yemen), Dixam plateau, Wadi Esgego, 12°28'09" N, 54°00'36" E, 300 m a. s. l., 2.-3.xii.2003, D. Král leg., 1 ♂, 1 ♀ (NMPC); Socotra Island (Yemen), Homhil, 23.-24.ii.2009, P. Lo Cascio & F. Grita leg., 1 ♀ (PLFG); Socotra Island (Yemen), Shoab, 10.iii.2000, V. Bejček & K. Šťastný leg., 1 ♀ (PZPC); Socotra Island (Yemen), W. Ayheft, 28.ii.-1.iii.2009, P. Lo Cascio & F. Grita leg., 1 spec. (PLFG).

**Distribution.** Egypt, Israel, Oman, Saudi Arabia, Sudan, Turkey, Yemen. First record from the Socotra Island.

***Mesoths socotrensis* sp. nov.**

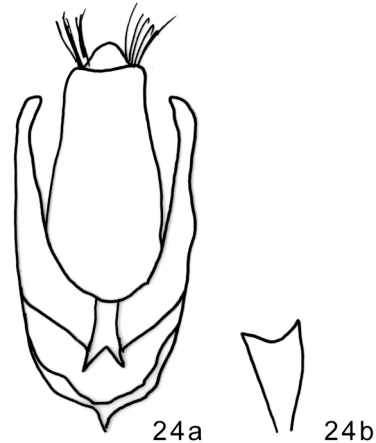
(Figs. 12, 24a,b)

**Type material.** Holotype (♂): Socotra Island (Yemen), Calanthia, 29.-30.iii.2001, V. Bejček & K. Šťastný leg., (PZPC). Paratype. (1 ♀): the same data as holotype (NMPC).

**Description.** Male (holotype). Oblong oval, transversally very convex; body length 2.5 mm, maximum width 1.4 mm. Ratio length:width of elytra 1.4. Light brown, pubescence yellowish-white, short, dense, recumbent. Antennae, palpi, and legs slightly lighter.

Head evenly convex, shining, with fine dense punctuation. Eyes flattened, relatively large. Frons twice as wider as eye diameter from dorsal view. Between eyes (from the middle of eye) with protruding sharp edge, bent forward, in the middle interrupted; antennae set in front of this edge. Antennae consisting of eleven antennomeres, antennomeres III-X serrate (Fig. 24b). Apical maxillary palpomere elongate, triangular with shallow emargination on apex.

Pronotum transverse, posterior angles strongly prolonged, sharp and long. Ratio length:width 0.7 (from anterior margin to posterior margin in the middle of pronotum, without posterior angles, only 0.5). Lateral margin invisible, whole margin slightly bordered. Surface shining-matt, with double punctuation - the first very sparse and fine, the second dense and coarse, distance between these punctures at least twice greater than their



Figs. 24: *Mesoths socotrensis* sp. nov.: a- aedeagus; b- apical maxillary palpomere.

diameter. Pubescence inclined mainly backwards, on sides in posterior part of pronotum inclined mainly to lateral margin. Setae are fan-shaped arranged.

Scutellum almost triangular, slightly longer than wide.

Elytra with distinct shoulders, shining-matt, with double punctuation - the first very sparse and fine, the second dense, coarse, distance between these puncture minimally twice greater than their diameter. Pubescence inclined backwards.

Aedeagus see Fig. 24a.

Female. Body length 3.0 mm, maximum width 1.6 mm, brown. Posterior angles of pronotum less distinct, not so long. Pubescence denser, on the elytra fan-shaped arranged.

**Differential diagnosis.** The species differs from other species of the genus by a lighter colour of body, finer punctuation of elytra and especially by the shape of the aedeagus.

**Etymology.** Derived from the name island Socotra, place of its distribution.

### Tricorynini White, 1982

#### *Rhamna socotrana* sp. nov.

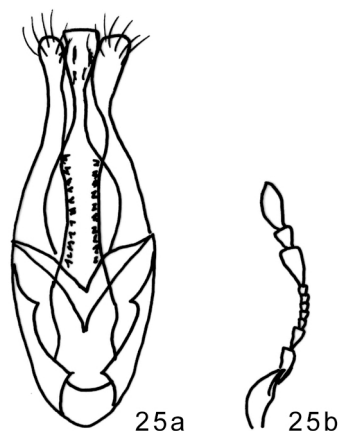
(Figs. 13, 25a,b)

**Type material.** Holotype (♂): Socotra Island (Yemen), Wadi Ayhaft, 24.-26.xi.2003, 12°36'38" N, 53°58'49" E, 190 m a. s. l., P. Kabátek leg. (ex larvae), (PZPC). Paratypes. (1 ♂, 4 ♀♀): the same data as holotype, (3 PZPC); (2 NMPC); (2 ♂, 9 ♀♀): Socotra Island (Yemen), Hadiboh, Qaariah, 28.xi.2003, 12°38'05" N, 054°12'39" E, 11 m a. s.l., P. Kabátek leg., (8 PZPC), (3 NMPC).

**Description.** Male (holotype). Shortly oblong oval, convex; body length 1.3 mm, maximum width 1.0 mm. Ratio length: width of elytra 1.0. Yellowish-brown, antennae, palpi and legs lighter.

Head small, evenly transverse convex, shining, with fine and dense punctuation, with long recumbent irregular silverish pubescence, inclined forwards. Eyes small, longitudinally roof-shaped convex. Frons three times wider than diameter of eye (from dorsal view). Antennae consisting of eleven antennomeres. Antennomere I robust, with sharp acute apex, antennomeres II-VIII short, filiform. Apical three antennomeres enlarged, antennomere IX the same length as antennomere XI, antennomere X slightly shorter, all almost rectangular, twice longer than wide, apical antennomere pointed on apex (Fig. 25b).

Pronotum transverse, ratio length:width 0.5, transversally convex, the widest in the 2/3. Base of pronotum bisinuate. Surface shining, with fine and sparse punctures, diameter of punctures smaller than



Figs. 25: *Rhamna socotrana* sp. nov.: a- aedeagus; b- antenna.

distance between them and with long, recumbent, silverish pubescence inclined from middle of pronotum to margins.

Scutellum small, triangular.

Elytra without distinct shoulders, shining with fine and sparse puncture, diameter of punctures smaller than distance between them and with long, recumbent, silverish pubescence, inclined backwards.

Aedeagus see Fig. 25a.

Female. Without visible dimorphisms.

**Variability.** Body length 1.2-1.4 mm, width 0.9-1.0 mm. Body sometimes brown.

**Differential diagnosis.** Very similar to *Rhamna saudita* Español, 1981 from which it differs with its more podgy body and the shape of the aedeagus.

**Etymology.** Derived from the name of Socotra Island, place of its distribution.

**Xyletininae Gistel, 1856**  
**Lasiodermini White, 1982**

***Dermolasia* gen. nov.**

**Type species.** *Dermolasia pectinicornis* sp. nov., by present designation.

**Description.** See description of *Dermolasia pectinicornis* sp. nov.

**Differential diagnosis.** From other species of tribe Lasiodermini it differs by shape of antennae (Fig. 26b), shape and colour of the body and the pubescence.

**Etymology.** Anagram of the name of similar genus *Lasioderma* Stephens, 1835, where “lasios” means bushy or hirsute in Greek, and “derma” means epidermis in Greek. Gender - femininum.

***Dermolasia pectinicornis* sp. nov.**

(Figs. 14, 26a,b,c,d)

**Type material.** Holotype (♂): Socotra Island (Yemen), Noked Mokhar, 31.iii.2001, V. Bejček & K. Štátný lgt., (PZPC).

**Description.** Male (holotype). Longly parallel, transversally slightly convex, on the disc flattened; body length 7.0 mm, maximum width 2.9 mm. Ratio length:width of elytra 1.65. Dark brown, pubescence grey, very dense, covering whole surface of body, body colour being thus almost invisible. Antennae, palpi and legs reddish brown.

Head flattened, slightly shining, with double punctuation - the first is coarse, sparse, umbilicate, the second is fine and dense; through dense pubescence almost invisible. Eyes large, globular, with very short, sparse pubescence. Frons twice wider than diameter of eye from dorsal view. Antennae consisting of eleven antennomeres. Antennomere I relatively

large and robust, antennomere II slightly longer wide, basal part parallel, antennomere III triangular, as long as wide, antennomere IV-X pectinate. Apical antennomere 1.8 times longer than penultimate antennomeres (Fig. 26b). Apical maxillary palpomere spindleform, 3 times longer than wide (Fig. 26c).

Pronotum transverse, ratio length:width 1.4, slightly transverse convex, lateral margin almost parallel, slightly narrowing backwards. All angles rounded. Margin slightly, but distinct edged. Lateral margin of pronotum only slightly bent (from lateral view). Disc of pronotum slightly flattened. Surface of pronotum shining, with double punctuation - the first is coarse and sparse, puncture diameter smaller than distance between punctures, the second is very fine and dense. Punctuation is almost invisible through fan-shaped patches dense recumbent white pubescence, inclined backwards.

Scutellum almost triangular with rounded sides.

Elytra without distinct shoulders, shining with double punctuation - the first is coarse and sparse, puncture diameter smaller than distance between punctures, the second is very fine and dense. Punctuation is almost invisible through fan-shaped patches of dense, recumbent, white pubescence, inclined backwards. Elytra without striae.

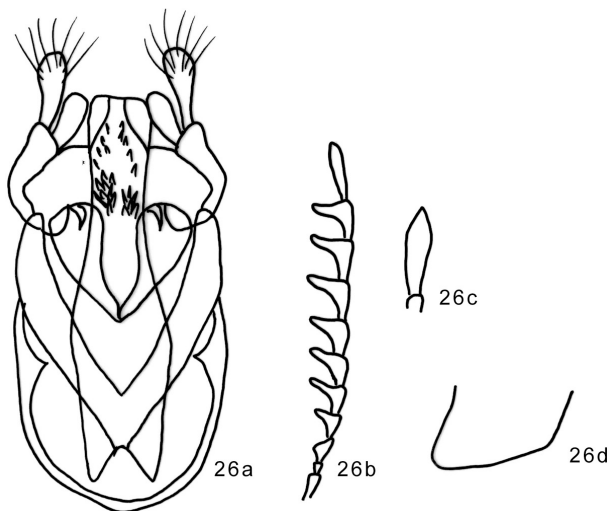
Tibia of anterior tarsi parallel, not wider on apex. Tarsomeres I-II of the same length, each shortly longer than tarsomeres III-IV together. Tarsomere V almost of the same length as tarsomeres I -II.

Ventrite II shortly longer than ventrites III or IV, ventrite V of the same length as III-IV together. Surface finely and densely punctate, with long, dense, recumbent, white pubescence.

Aedeagus see Fig. 26a.

Female. Unknown.

**Etymology.** Derived from the shape of antennae - from Latin words “pectinate” - pectiniform, and “cornus” - cornu (= antennae).



Figs. 26: *Dermolasia pectinicornis* gen. nov., sp. nov.: a- aedeagus; b- antenna; c- apical maxillary palpomere; d- lateral margin of pronotum.

***Lasioderma karlae* sp. nov.**

(Figs. 15, 27a,b,c,d)

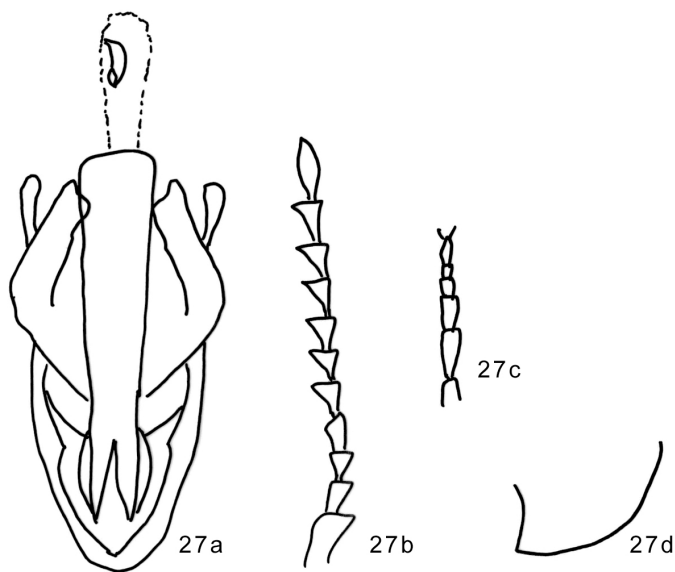
**Type material.** Holotype (♂): Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Hájek leg., (NMPC). Paratypes. (1 ♂): Socotra Island (Yemen), Noged plain, Qaareh (waterfall), 12°20'10" N, 53°37'56" E, 57 m a. s. l., J. Farkač leg., (PZPC); (1 ♀): Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Bezděk leg., (PZPC); (1 ♀): Socotra Island (Yemen), Wadi Ayhaft, 12°36.5' N; 53°58.9' E, 200 m, 7.-8.xi.2010, J. Bezděk leg., (NMPC).

**Description.** Oblong oval, transversally flattened; body length 1.9 mm, maximum width 0.8 mm. Ratio length:width of elytra 1.3. Body, antennae, palpi and legs light yellowish-brown. Pubescence yellowish-white.

Head evenly flattened, shining, finely and sparsely punctate, distance between punctures greater than their diameter. Eyes slightly convex. Frons 1.5 times wider than diameter of eye from dorsal view. Pubescence short, recumbent, sparse, inclined forwards. Antennae consisting of eleven antennomeres. Antennomere I robust and long, longer than antennomere II-III together, antennomere II slightly longer than antennomere III, thin, antennomere III slightly serrate, antennomeres IV-X serrate, with sharp angles, slightly longer than wide, apical antennomere twice longer than wide, spindleform (Fig. 27b).

Pronotum strongly transverse, twice wider than long, slightly transverse convex, their sides fluently rounded (from lateral view) (Fig. 26d). Surface of pronotum shining, sparse and coarse punctate, diameter of punctures the same as distance between them. Pubescence of pronotum short, recumbent, dense, inclined backwards.

Scutellum small, triangular, as long as wide.



Figs. 27: *Lasioderma karlae* sp. nov.: a- aedeagus; b- antenna; c- anterior tarsi; d- lateral margin of pronotum.

Elytra without distinct shoulders, without striae. Surface of elytra shining, with sparse and coarse punctures, diameter of punctures the same as distance between them. Pubescence of elytra short, recumbent, dense, inclined backwards.

Anterior tibia not wider on apex. Tarsomere I the longest, 1.3 times longer than tarsomere II and as long as tarsomeres III-IV together. Tarsomere V thin, as long as tarsomere II.

Aedeagus as in Fig. 27a.

Female. Antennomeres IV-X without sharp angles, more rounded and slightly serrate.

**Variability.** Body length 1.7-1.9 mm.

**Differential diagnosis.** The species is very similar to *Lasioderma* from this region and differs especially by the shape of the aedeagus, and also by the shape of the pronotum and antennae.

**Collection circumstances.** The new species was collected at the type locality by light trap situated on a sand dune with *Tamarix* sp. shrubs (J. Hájek, pers. comm.).

**Etymology.** Dedicated to my daughter Karla.

### **Anobiinae Fleming, 1821**

#### ***Metholbium* gen. nov.**

**Type species.** *Metholbium fulvum* sp. nov., by present designation.

**Description.** See description of *Metholbium fulvum* sp. nov.

**Differential diagnosis.** The species differs from all the species of the subfamily (especially not classified in known tribes) by the shape of antennae and different shape of the metathoracic ventrite between coxae. The tribe status is unclear, it will probably be classed within a new tribe.

**Etymology.** The genus name is composed of the name of genus *Metholcus* Jacquelin du Val, 1860, to which is similar at the first glance, and *Anobium* Fabricius, 1775, a type species of the subfamily. Gender - neutrum.

#### ***Metholbium fulvum* sp. nov.**

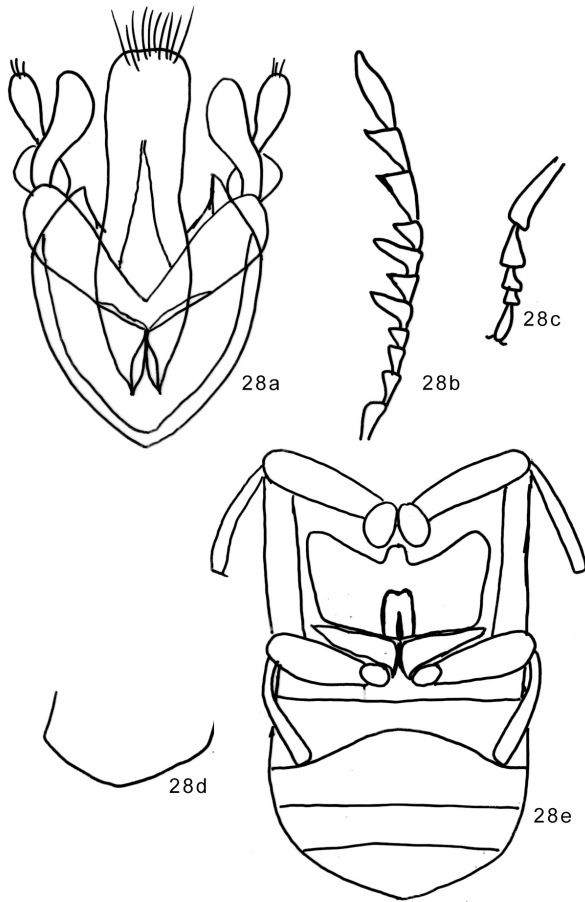
(Figs. 16, 28a,b,c,d)

**Type material.** Holotype (♂): Socotra Island (Yemen), Noged, Mokhar, 31.iii.2001, V. Bejček & K. Šťastný leg., (PZPC).

**Description.** Longly oval, almost parallel, transversally slightly convex; body length 3.7 mm, maximum width 1.2 mm. Ratio length:width of elytra 1.9. Yellowish-brown; antennae, palpi and legs slightly lighter. Pubescence yellowish-white.

Head transversally moderately convex between clypeus and frons with transverse depression. Surface shining-matt, with double punctuation - the first very dense and fine, the second coarser, sparse, distance between punctures the same as their diameter. Pubescence





Figs. 28: *Metholbium fulvum* gen. nov., sp. nov.: a- aedeagus; b- antenna; c- posterior tarsi; d- lateral margin of pronotum; e - metathoracic ventrite and abdominal ventrites.

sparse, recumbent, inclined forwards, only a few longer setae are semierect, on frons shortly erect. Between eyes (from first third of eye) with protruding sharp and distinct edge, going to clypeus, in the middle interrupted; antennae are set in front of this edge. Eyes large, globular with short, sparse, erect setae. Frons twice wider than diameter of eye from dorsal view. Mandibles with dense, long, erect setae. Antennae consisting of eleven antennomeres. Antennomere I robust and long, 1.5 times longer than antennomere II, which is long and slightly serrate, antennomere III slightly longer than wide, shorter than antennomere II. Antennomeres IV, VI and VIII serrate, V and VII pectinate. Antennomere IV as long as wide, antennomere V twice wider than long, antennomere VI 1.6 times wider than long, antennomere VII, 2.6 times wider than long, antennomere VIII shortly longer than wide. Apical three antennomeres enlarged, two penultimate antennomeres serrate, antennomere IX serrate 1.3 times longer than wide, antennomere X serrate, slimmer, 1.5 times longer than wide (Fig. 28a) Apical antennomere spindleform, 2.5 times longer than wide. Apical maxillary palpomere spindleform.

Pronotum transverse, 1.6 times wider than long, evenly convex, especially transversally; disc of pronotum flattened, more or less transversally rectangular, with fine border on circumference. Angles of pronotum rounded (from lateral view) (Fig. 28d). Surface of pronotum shining, with double punctuation - the first very fine and dense, the second coarse and also dense, distances between punctures the same as their diameter. Pubescence sparse, longer, recumbent, mainly inclined backwards.

Scutellum 1.2 times longer than wide, rounded.

Elytra with almost indistinct shoulders, shining-matt, without striae, with double punctuation - the first fine and dense, the second coarse and also dense, distance between punctures less than their diameter. Pubescence short, dense, recumbent, inclined backwards.

Legs long and slim, tibiae slightly bent, with dense, short, semierect pubescence, inclined to apex of tibiae. Tarsomere I of posterior tarsi twice longer than tarsomere II tarsomeres III and IV short, together of the same length as tarsomere II. Tarsomere V slightly longer than tarsomere II (Fig. 28c). Claws small, without teeth. Anterior tarsi shorter.

Metathoracic ventrite on posterior margin in middle with rounded edge, on the top slightly emarginate, in the middle of this area with longitudinal edge, not extending to anterior margin of rounded edge. Anterior and middle coxae approached, in touch; posterior coxae slightly moved to the side, elongate, narrow and pointed on apex, trochanter transversally oval. The second ventrite of aedeagus on posterior margin rounded in the middle, other straight, of about the same width.

Aedeagus as in Fig. 28a.

Female. Unknown.

**Differential diagnosis.** The species differs from the second species of the genus by its shape of the aedeagus and longitudinal edge on the metathoracic ventrite in the area with sharp rounded edge.

**Etymology.** Derived from Latin word “fulvus” - yellow.

***Metholbium pseudofulvum* sp. nov.**

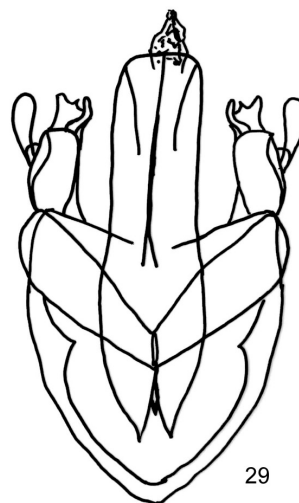
(Figs. 17, 29)

**Type material.** Holotype (♂): Socotra Island (Yemen), Noged plain (sand dunes), Sharet Halma vill. env., 12°21.9' N, 54°05.3' E, 20 m a. s. l., 10.-11.xi.2010, J. Hájek leg. (NMPC). Paratypes. (3 ♂♂, 1 ♀): Socotra Island (Yemen), Wadi Faar, 12°43.3' N, 54°19.5' E, 69 m a. s. l., V. Bejček & K. Šťastný leg., (2 NMPC); (2 PZPC).

**Description.** Oblong oval, almost parallel, transversally slightly convex. Body length 3.6 mm, maximum width 1.2 mm. Ratio length:width of elytra 1.9. Yellowish-brown, antennae, palpi and legs slightly lighter. Pubescence yellowish-white.

Head transversally moderately convex, between clypeus and frons with transverse depression. Surface shining-matt, with double punctuation - the first very dense and fine, the second coarser, sparse, distance between punctures the same as their diameter. Pubescence sparse, recumbent, only a few longer setae are semierect, inclined forwards, on frons shortly erect. Between eyes (from the first third of eye) with protruding sharp and distinct edge, going to clypeus, in the middle interrupted; antennae set in front of this edge. Eyes large,

globular with short, sparse, erect setae. Frons twice wider than diameter of eye from dorsal view. Mandibles with dense long erect setae. Antennae consisting of eleven antennomeres. Antennomere I robust and long, 1.5 times longer than antennomere II, which is long and slightly serrate, antennomere III slightly longer than wide, shorter than antennomere II. Antennomeres IV, VI and VIII serrate, V and VII pectinate. Antennomere IV as long as wide, antennomere V twice wider than long, antennomere VI 1.6 times wider than long, antennomere VII, 2.6 times wider than long, antennomere VIII shortly longer than wide. Apical three antennomeres enlarged, two penultimate antennomeres serrate, antennomere IX serrate 1.3 times longer than wide, antennomere X serrate, slimmer, 1.5 times longer than wide. Apical antennomere spindleform, 2.5 times longer than wide. Apical maxillary palpomere spindleform.



Figs. 29: *Metholbium pseudofulvum* sp. nov.: aedeagus

Pronotum transverse, 1.6 times wider than long, evenly convex, especially transversally; disc of pronotum flattened, more or less transversally rectangular, with fine border on circumference. Angles of pronotum rounded (from lateral view). Surface of pronotum shining, with double punctation - the first very fine and dense, the second coarse and also dense, distance between punctures the same as their diameter. Pubescence sparse, longer, recumbent, mainly inclined backwards.

Scutellum 1.2 times longer than wide, rounded.

Elytra with almost indistinct shoulders, shining-matt, without striae, with double punctations - the first fine and dense, the second coarse and also dense, distance between punctures less than their diameter. Pubescence short, dense and recumbent, inclined backwards.

Legs long and slim, tibiae slightly bent with dense short semierect pubescence, inclined to apex of tibiae. Tarsomere I of posterior tarsi twice longer than tarsomere II tarsomeres III and IV short, together of the same length as tarsomere II. Tarsomere V slightly longer than tarsomere II. Claws small, without teeth. Anterior tarsi shorter.

Metathoracic ventrite on posterior margin in the middle with rounded elevated area, without sharp edge, on the top slightly emarginate, in the middle of this area with longitudinal deep furrow, which does not extend to anterior margin of rounded edge. All ventrites straight, of about the same width.

Aedeagus as in Fig. 29a.

Female. Without visible sexual dimorphism.

**Variability.** Body length 3.4-3.8 mm, maximum width 1.1-1.2 mm. Basal antennomeres darker.

**Differential diagnosis.** The species differs from *Metholbium fulvum* sp. nov. by its shape of the aedeagus and longitudinal deep furrow on the mesoventrite in the elevated area but without rounded sharp edge.

**Etymology.** Derived from the Greek word “pseudos” - pseudo and Latin word “fulvus” - yellow which shows similarity to the previous species - *Metholbium fulvum* sp. nov.

ACKNOWLEDGEMENTS. I am grateful to my colleagues Jan Bezděk (Brno, Czech Republic), Vladimír Bejček, Jiří Hájek, Jan Farkač, Petr Kabátek, David Král and Karel Štátný (all Praha, Czech Republic) who provided me with material from Socotra Island and for loan of material from Socotra Island. My thanks also belong to my wife Marie for her help with preparation of this manuscript and moral support in writing of this paper, and to my colleague Monika Boušková for making photos for the paper. This work was supported by the Ministry of Agriculture of the Czech Republic, project no. MZe 002070203 “Stabilization of forest functions in athropogenically disturbed and changing environmental conditions”.

## REFERENCES

- BATELKA J. 2012: Socotra Archipelagos - a lifeboat in the sea of changes: advancement in Socotran insect biodiversity survey. Pp. 1-26. In: HÁJEK J. & BEZDĚK J. (eds.): Insect biodiversity of Socotra Archipelago. *Acta Entomologica Musei Nationalis Pragae* 52 (supplementum 2): i-vi + 1-557.
- BEZDĚK J., PURCHART L., KRÁL K. & HULA V. 2012: List of local Socotran geographical names used in entomological literature. Pp. 27-67. In: HÁJEK J. & BEZDĚK J. (eds.): Insect biodiversity of Socotra Archipelago. *Acta Entomologica Musei Nationalis Pragae* 52 (supplementum 2): i-vi + 1-557.
- BELLÉS X. 2005: A synopsis of the genus *Silisoptinus* Pic, 1917 (Coleoptera: Ptinidae), with the description of a new species from Socotra Island. *Elytron* 19: 77-82.
- BELLÉS X. 2009: Spider beetles (Coleoptera, Ptinidae) from the Socotra Archipelago. *Fauna of Arabia* 24: 145-154.
- BELLÉS X. 2012: *Ptinus bertranpetiti*, a new species of spider beetle from Socotra Island (Coleoptera: Ptinidae). Pp. 219-222. In: HÁJEK J. & BEZDĚK J. (eds.): Insect biodiversity of Socotra Archipelago. *Acta Entomologica Musei Nationalis Pragae* 52 (supplementum 2): i-vi + 1-557.
- BOROWSKI J. 2002: An African catalogue of the genus *Dignomus* Wollaston (Coleoptera, Ptinidae). *Baltic Journal of Coleopterology* 2: 67-70.
- BOROWSKI J. 2007: Family Ptinidae Latreille, 1802. (Subfamilies Gibbiinae Mulsant et Rey, 1868, and Ptininae Latreille, 1802). Pp. 328-339. In: LÖBL I. & SMETANA A. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 4. Elateroidea - Derodontoidea - Bostrichoidea - Lymexyloidea - Cleroidea - Cucujoidea*. Apollo Books, Stenstrup, 935 pp.
- ESPAÑOL F. 1979: Insects of Saudi Arabia. Coleoptera: Fam. Anobiidae. *Fauna Saudi Arabia* 1: 251-256.
- ESPAÑOL F. 1981: Insects of Saudi Arabia. Coleoptera: Fam. Anobiidae (Part 2). *Fauna Saudi Arabia* 3: 266-272.
- GAHAN C. J. 1903: Insecta: Coleoptera. Pp. 261-292. In: FORBES H. O. (ed.): The Natural History of Socotra and Abd-el-Kuri: Being the report upon the results of the conjoint expedition to these islands in 1898-9. *Special Bulletin of the Liverpool Museum*, xlvii + 598 pp.
- TOSKINA I. N. 1998: Rare and new Anobiidae (Coleoptera) from the Arabian Peninsula. *Fauna of Arabia* 17: 51-91.
- TOSKINA I. N. 2004: A new species of Clada Pascoe, 1887 (Coleoptera: Anobiidae) from the Socotra Archipelago. *Fauna of Arabia* 20: 459-462.
- WRANIK W. 2003: *Fauna of the Socotra Archipelago; field guide*. Universitätsdruckerei, Rostock, 542 pp.
- ZAHRADNÍK P. 2007: Family Ptinidae Latreille, 1802 (without subfamilies Gibbiinae Mulsant et Rey, 1868 and Ptininae Latreille, 1802). Pp. 339-362. In: LÖBL I. & SMETANA A. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 4. Elateroidea - Derodontoidea - Bostrichoidea - Lymexyloidea - Cleroidea - Cucujoidea*. Apollo Books, Stenstrup, 935 pp.
- ZAHRADNÍK P. 2009: *Order Coleoptera, family Ptinidae*. Pp. 174-186. In: HARTEN A. VAN (ed.): *Arthropod fauna of the United Arab Emirates. Volume 2*. Multiply Marketing Consultancy Services, Abu Dhabi, 786 pp.

Received: 15.11.2014

Accepted: 22.12.2014