

**A review of the genus *Dermatohomoeus* Hlisnikovský, 1963
(Coleoptera: Leiodidae: Leiodinae)
from Madagascar with the descriptions of seven new species**

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Abstract. *Dermatohomoeus hirsutus*, *D. operculatus*, *D. banari*, *D. parameralis*, *D. lobatus*, *D. montanus*, *D. brevipterus* spp. nov. all from Madagascar are described and distinguished from similar species. A short diagnosis of the genus *Dermatohomoeus* Hlisnikovský, 1963 and a key to the determination of the species known from Madagascar are provided. The male and female genitalia of the Malagasy known *Dermatohomoeus* species are figured. New distributional data on the Malagasy species are presented.

INTRODUCTION

All 20 species of the family Leiodidae, known to occur in Madagascar up to now, belong to the following tribes of the subfamily Leiodinae: Estadiini Portevin, 1914 (five species of the genus *Dietta* Sharp, 1876), Pseudoliodini Portevin, 1926 (seven species of *Dermatohomoeus* Hlisnikovský, 1963) and Scotocryptini Reitter, 1884 (seven species of *Cyrtusiola* Hlisnikovský, 1974 and one species of the genus *Pseudocyrtusiola* Švec, 2004). The present paper deals with the genus *Dermatohomoeus*.

The genus *Dermatohomoeus* was described by Hlisnikovský in 1963, but the first species belonging to the genus at present, was described by Champion in 1923 as *Liocolenis portevini*. Subsequently Daffner (1988a) synonymised the genus *Liocolenis* Portevin, 1905 with *Colenisia* and transferred (Daffner 1988b) *Liocolenis portevini* to the genus *Dermatohomoeus*.

Hlisnikovský (1963) based the description of the genus on six species from New Guinea. Afterwards more species of the genus were discovered and described from Australia and beside the East-south of Asia (e.g. Daffner 1988b) also from the eastern Palaearctic (e.g. Švec 2009). The first species from the Sub-Saharan Africa (Burundi, Rwanda) was described by Daffner (1988b). Later Švec (2004) described seven *Dermatohomoeus* species from Madagascar.

Altogether 45 *Dermatohomoeus* species are known from various bio-geographical regions of the Old World up to now. At present there are, including the species described as new in this paper, 52 known *Dermatohomoeus*, of which 14 are Malagasy. A description of further one new *Dermatohomoeus* from Madagascar is anticipated (Švec, in press). This species is included in the key presented below. As its description has not been published yet, its name is not mentioned in the key.

MATERIAL AND METHODS

This contribution follows the precedent paper (Švec in press) as the second part based on the results of the project focused on Leiodinae fauna in Madagascar. The project is one of the components of the extensive, beginning in the year 2010, still running research of the Malagasy Insecta managed with the kind approval of the relevant Malagasy authorities by Petr Baňář, curator of the Moravian Museum, Brno (Czech Republic) and his Malagasy students. The aim of this part II is to review the Malagasy species of the genus *Dermatohomoeus*.

The vast majority of *Dermatohomoeus* mentioned in this paper was collected by sifting and extracting using the Winkler apparatus. Only few specimens were collected using flight interception traps.

The holotype and paratypes are indicated by a red label bearing the status of the specimen, name of the species, the name of the author of the species and the year of the designation and are attached to the same pin as the respective specimen. The red labels attached to the holotypes are initialled by the author.

The examined specimens preserved in 40% alcohol were either dissected or directly mounted on paper cards. The dissected male and female genitalia were taken from alcohol, over clove oil and 40% ethyl alcohol again, then water and finally put into polyvinylpyrrolidone (Lompe 1986) on a transparent mount added to the same pin as the dissected specimen or directly on the mounting card near to the relevant specimen. The dissected specimens also bear a label with information that the genitalia are glued by a water-soluble medium.

The descriptions of the new species in the present paper are based on the holotypes. The shapes of the endophallus are not expressed verbally because the endophallus usually contains many small structures, beside unpaired moon-shaped sclerite, but they are illustrated using dotted components in the line drawings showing dorsal view of the aedeagus. Variability is mentioned in the paragraph "Variation" where necessary, and includes features exhibited by the paratypes. Important characters of the sexual dimorphism are also included in the mentioned paragraph. The characters defining the genus are presented in the generic definition below, therefore they are not mentioned in the descriptions.

The measurements of the total body length mentioned in the original description were taken from all specimens examined. Specific measurements of the individual body parts were taken from the holotype only except in the paragraph concerning the variability. The measurements of morphologic body parts were measured to the decimal place of millimetre, the measurements of the genitalia were measured to two decimal places of millimetre.

Taking into account the combinations of the data, geographic coordinates and altitude, there were dozens number of the localities, where *Dermatohomoeus* were discovered. Therefore the collecting data are fully provided only in the type series. They are cited in quotation marks being taken from the locality labels accompanying the specimens examined. Individual lines from the original locality labels are separated by a slash "/" following by a keystroke; the individual labels are separated by double slash "//". A slash is used also in the abbreviations of the locality sites and data without any key strokes after slashes. The font of the letters is unified.

The faunistic data are simplified and abbreviated in the paragraph “Review of the distributional data” and also in the Fig. 1 illustrating approximate positions of the collecting sites. The abbreviations of the localities are as follows:

ABT	C. Madagascar, Ambohitantely Spec. Res.
ASB	C. Madagascar, Andasibe-Mantadia N. P.
AKF	NW. Madagascar, Ankarafantsika N. P.
ISL	W. Madagascar, Isalo N. P., Analalava forest
MDA	N. Madagascar, Montagne d’Ambre
MFR	N. Madagascar, Montagne de Français
MTD	C. Madagascar, Andasibe-Mantadia N. P.
RNF	E. Madagascar, Ranomafana N. P.
VOH	SE Madagascar, Réserve Expérimentale de Vohimana
ZOM	SW Madagascar, Zombitse-Vohibasia N. P.

The official country name The Republic of Madagascar is simplified to Madagascar in the present paper.

Abbreviations of the deposition sites of the type and other examined material:

MMBC	Moravian Museum in Brno, collection, Czech Republic;
ZSPC	Zdeněk Švec, Praha, private collection, Czech Republic.

Abbreviations of body parts and measurements:

AII-AXI	antennomeres II-XI;
TI-TV	tarsomeres I-V;
L	length;
W	width;
L/W or W/L	ratio between measurements.

Terminology:

endophallus =	sclerite or sclerites or other sclerotized structures inside median lobe detectable in transmitted light;
median lobe =	median lobe of aedeagus (penis, phallus);
mesoventral carina =	longitudinal carina located centrally on mesoventrite;
operculum =	ventral plates - a lid covering ventro-apical foramen of penis;
parallelogram =	micro-sculpture represented by cells with predominantly parallel long transversally oriented strigoses connecting each other by short conjunctions;
procoxal rest =	flatly elevated transverse anterior part of mesoventrite;
tenent setae =	male tarsal adhesive setae present mainly on anterior tarsi.

TAXONOMY AND FAUNISTICS

Dermatohomoeus Hlisenkovský, 1963

Dermatohomoeus Hlisenkovský 1963: 301, type species: *Dermatohomoeus guineensis* Hlisenkovský, 1963.

Acanthodiaprepus Hlisenkovský, 1972: 135, type species: *Acanthodiaprepus silvaticus* Hlisenkovský, 1972.

Diagnosis. Beside the morphology features typical for the members of the tribe Pseudoliodini, the species of the genus possess the following basic characters. The species are of

uniform oval shape (as in Fig. 2), the dorsum is partly or entirely micro-sculptured beside puncturation, elytra, in all the up to now known species, with transverse micro-strigosity formed by zigzag lines. Entire dorsum is covered with punctures equipped by recumbent usually short unobtrusive setae (puncturation on elytra as in Fig. 3).

Head is prognathic, rather small widest at well developed semi-bulbous latero-anteriorly oriented eyes (as in Fig. 4). Usually two large punctures located on each side behind clypeus, another pair of large punctures between eyes. Mouthparts as in Fig. 5. Antenna 11-segmented with 5-segmented interrupted slim club.

Pronotum broadest at base, lateral sides evenly roundly curved anteriorly in both dorsal and lateral view. Base usually almost straight, emarginate before hind angles. Anterior angles not detectable in dorsal view, broadly rounded in lateral view.

Elytra covered by zig-zag transversally oriented strigosity (as in Fig. 3). Puncturation of the elytra usually seriate, frequently forming longitudinal double rows. Epipleura smooth with several sparse transverse strigosity hardly visible in some species or exceptionally lacking.

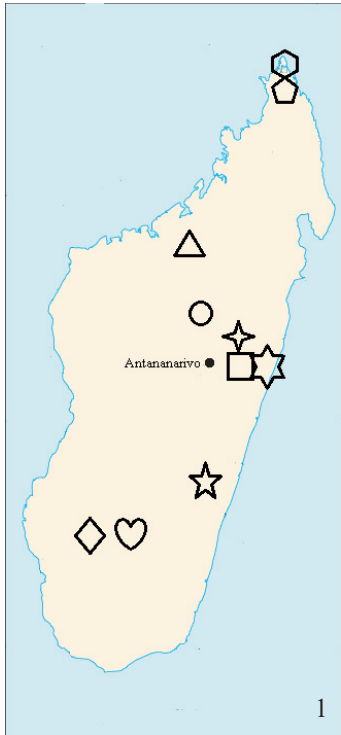
Mesoventrite with broad pro-coxal rest anteriorly and longitudinal almost vertical carina posteriorly. A shallow, but distinct emargination between procoxal rest and longitudinal carina detectable in lateral view. Central part of the procoxal rest overlaps above the emargination in all the species known from Madagascar. The disposition of the mesoventral longitudinal carina is the important morphological character, omitted in the original description. The structure of the mesoventrite is the best difference between *Dermatohomoeus* and the morphologically similar genus *Colenisia* Fauvel, 1903. While the longitudinal mesoventral carina connects procoxal rest anteriorly in the genus *Colenisia*, the same carina and procoxal rest are divided by short deepened interspace in the genus *Dermatohomoeus* (as in Figs. 6, 7).

Metaventrite well developed with weakly rounded anterior process, sparsely covered by recumbent setae medially, micro-sculptured, lacking setae and punctures laterally.

Abdomen with five visible ventrites (as in Fig. 6) with sparse punctures equipped with recumbent setae.

Anterior tarsi show distinct sexual dimorphism. While anterior tarsomere I is strongly widened, protracted and equipped by tenent setae of the spatulate shape in males (Fig. 8) ventrally, female protarsus I is slim or very weakly expanded, weakly elongate.

The aedeagus is of usual "leiodinae type" lacking phallobase, consisting of penis and parameres. Its specific shape of the majority of the up to now known *Dermatohomoeus* species is given by the presence of very strikingly developed symmetric operculum that is regularly visible in the dorsal view at the lateral sides of the apical part of penis (e.g. as in Fig. 9). The endophallus possesses unpaired and paired sclerites enveloped by penis and beside them also some sclerites situated proximally out of penis. The largest and most obtrusive unpaired sclerite typical in the *Dermatohomoeus* known from Madagascar resembles horizontally laid letter C or narrow half moon-shaped object. This sclerite is of very similar if not identical shape in the species in Madagascar. On the other hand the shape of the other smaller proximal sclerites dislocated from the penis and also the shape of the sclerites enveloped by penis seem to be a little variable as a result of possible shift of the endophallus position inside the penis. Parameres possess specific characters in some



- ABT
- ASB
- △ AKF
- ◇ ISL
- ⬠ MDA
- ⬡ MFR
- ☆ MTD
- ☆ RNF
- ☆ VOH
- ♡ ZOM

Fig. 1. Madagascar schematically, areas of sampling sites.

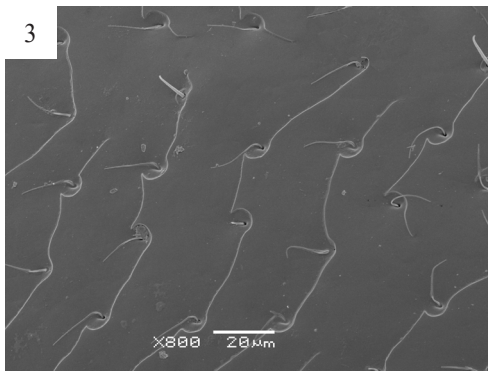
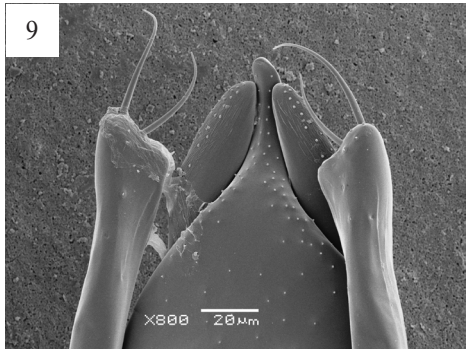
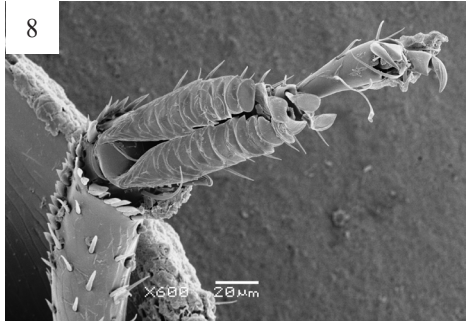
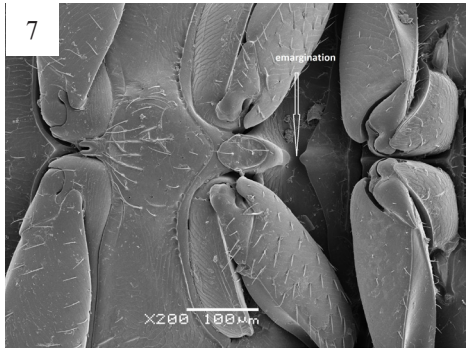
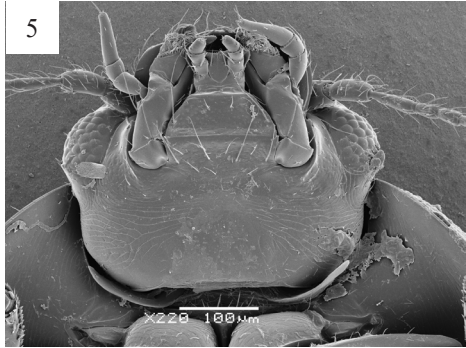
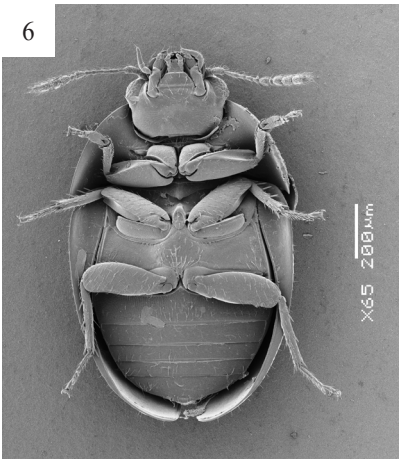
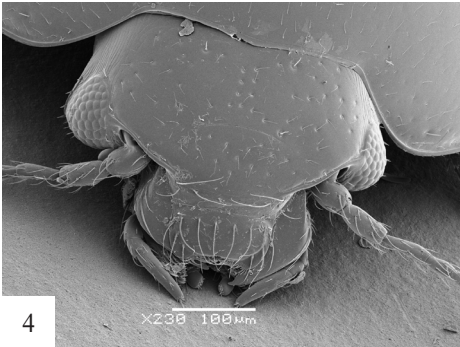


Fig. 3: *Dermatohomoeus ferrugineus* Švec, 2004. Surface of clytron. (photo by Petr Baňář).

species, especially being swollen at apex, clavate or differently shaped at their distal part. Parameres are bisetose in up to now known species. Generally the shape of the top of penis, operculum and parameres seem to be of more important diagnostic importance than shape of the endophallus observing view-through penis.

Spermatheca is unlike to that in the other Leiodinae being of the very specific shape, typical for the genus. Spermatheca resembles rugby ball-shape with two similar parallel ridges situated on the same surface. When comparing spermatheca of the individual species it is necessary to take into account beside the morphological variability also possible



Figs. 2, 4-9. *Dermatohomoeus madagascarensis* Švec, 2004: 2- body, dorsal view; 4- head dorsally; 5- head ventrally; 6- body, ventral view; 7- meso- and metaventrite (arrow points to the emargination between procoxal rest and carina); 8- protarsus of male, ventral view; 9- distal part of aedeagus, dorsally (photos by Petr Baňář).



deformation of the spermatheca caused by a different density of the protecting medium and a spatial position of the observed spermatheca. In general, the diagnostic importance of the shape of spermatheca in *Dermatohomoeus* not very clear, as the shape does seem to be characteristic sufficiently for the differentiation of the individual species. Nevertheless the spermatheca of all the *Dermatohomoeus* females known from Madagascar is figured (Figs. 25-36) in spite of the doubts concerning their taxonomical importance.

The characters of the generic value that are presented above are not repeated in the original descriptions given below.

Key to the Malagasy species of the genus *Dermatohomoeus*

(Using the key it is necessary to take into account that the species of the genus are of very uniform shape of the body and very similar dorsal surface structures. The best way to determine the species is to assess the shape of the male genitalia)

1. Pronotum at least postero-laterally or basally transversely micro-strigose. Antennal club bicoloured, yellow-brown to brown-black with some antennomeres lighter.2
- Pronotum without strigosity. Antennal club unicolorous, yellow-brown, at most distal part of AXI lighter. .8
- 2(1) Dorsum shiny, surface punctures equipped with short unobtrusive setae approximately as long as spaces between punctures or shorter.3
- Dorsum matt, distinctly hairy, surface punctures equipped by obtrusive, long setae longer than spaces between punctures. Operculum with pair of long, curved, slim processes extending beyond tip of penis. Aedeagus in Fig. 10. Length 2.7- 3.0 mm. *D. hirsutus* sp. nov.
- 3(2) Antennomeres dark brown to black except AI and AII and sometimes also apex of AXI. Both lateral branches of operculum wide, weakly concave at apex. Aedeagus as in Fig. 11, spermatheca in Fig. 25. Length 2.0-2.2 mm.*D. angelinii* Švec, 2004
- At least antennomeres VII and AVIII dark, AII light, rest light or reddish or red-brown.4
- 4(3) Disc of pronotum sparsely finely punctured, punctures separated by about 4-8 times their diameter. Tips of operculum reach at least top of penis (aedeagus in Figs. 13-16).5
- Disc of pronotum extremely finely and sparsely punctate, punctures separated by about 8-10 or more times their own diameter. Elytra with fine double or even triple rows of punctures. Tips of operculum not reaching level of penis top. Aedeagus as Fig. 12, spermatheca in Fig. 26. Length 1.7-2.1 mm. *D. micropunctatus* Švec, 2004
- 5(4) Elytral double punctured rows well expressed, row punctures distinctly larger than those in intervals.6
- Elytra with slightly developed regular double rows of punctures similar in size and strength to those in intervals at anterior part of elytra. Aedeagus in Fig. 13, spermatheca in Fig. 27. Length 1.8-2.7 mm. *D. similis* Švec, 2004
- 6(5) Pronotum with shallow medio-laterally oriented depression. Each lateral branch of operculum visible in dorsal view, bifurcate or simply pointed.7
- Pronotum evenly convex without any depression. Operculum lyre-shaped. Aedeagus in Fig. 14, spermatheca in Fig. 28. Length 2.0-2.3 mm.*D. operculatus* sp. nov.
- 7(6) Body larger (2.1-2.7 mm). Each lateral branch of operculum bifurcate. Aedeagus as Fig. 15, spermatheca as in Fig. 29. *D. annae* Švec, 2004
- Body smaller, 1.7-2.0 mm. Each lateral branch of operculum simply pointed apically. Penis (Fig. 16) similar to that in *D. similis*, spermatheca in Fig. 30. *D. banari* sp. nov.

- 8(1) Pronotum (at least on basal half) distinctly, densely, punctured, punctures separated by 3-6 times their diameter. Aedeagus as in Figs. 17-19.9
 - Pronotum very sparsely to moderately unobtrusively punctured, punctures separated by about 6-15 times their diameter. Aedeagus as in Figs 20-24. 11
- 9(8) Whole pronotum densely punctured, punctures separated by about 3-6 times their diameter. 10
 - Pronotum densely punctured on pronotal posterior half - punctures separated by about 3 times their diameter; puncturation distinctly sparser on anterior part of pronotum - punctures separated by 4-5 times their diameter. Penis shortly rounded at its top (Fig. 17). Length 1.4-1.6 mm.*D. sp.* in press
- 10(9) Antennomere AXI broader, or at least as broad as AX. Antennae usually unicolorous, red-brown, exceptionally several basal antennomeres very slightly lighter. Posterior pronotal angles distinctly rounded in dorsal and lateral view. Parameres strikingly widened and medio-apically emarginate. Aedeagus in Fig. 18, spermatheca in Fig. 31. Length 1.4-1.7 mm.*D. parameralis* sp. nov.
 - Antennomere AXI narrower than AX. Antennal club with exception of distal third of AXI darker than remaining antennomeres. Hind angles of pronotum abruptly rounded in dorsal and lateral view. Penis terminating in short conical process broadly rounded apically. Aedeagus in Fig. 19. Length 1.8-2.0 mm. ...
*D. lobatus* sp. nov.
- 11(8) Elytra with scarcely distinguishable double rows of punctures; elytral intervals with seriate punctures of similar size intensity and density to those of the double rows, making it difficult to distinguish the double rows themselves (as in Fig. 3).. 12
 - Elytra with well recognizable double rows of punctures, interval punctures smaller and distinctly sparser than row punctures. 14
- 12(11) Body smaller (1.3-1.9 mm). 13
 - Body larger (2.2-2.4 mm). Head punctures similar to elytral row punctures. Interval elytral punctures irregularly arranged. Top of penis wide, broadly rounded (Fig. 20). Spermatheca in Fig. 32.
*D. montanus* sp. nov.
- 13(12) Head punctures distinctly smaller and finer than those on elytra. Operculum not visible in dorsal view. Parameres obtrusively thickened at apex. Antenna unicolorous yellow-red. Membranous wings shortened. Penis terminating in long conical process. Elytral surface in Fig. 3. Aedeagus in Fig. 21, spermatheca in Fig. 33. Length of body 1.3-1.6 mm. *D. ferrugineus* Švec, 2004
 - Head punctures approximately as large and deep as elytral row punctures. Membranous wings normally developed. Operculum partly visible on each side of apical part of penis. Parameres weakly thickened apically. Aedeagus as in Fig. 22, spermatheca in Fig. 34. Length 1.5-1.8 mm.*D. bulirschi* Švec, 2004
- 14(11) Elytral strigosities fine but well developed on entire elytral surface. Lateral branches of operculum not reaching apex of penis, hardly or even not at all detectable in dorsal view. Penis terminating in small, semi-conical, process. Parameres thickened, club-shaped apically. Aedeagus in Fig. 23, spermatheca in Fig. 35. Length 1.3-1.9 mm. *D. brevipterus* sp. nov.
 - Elytral strigosities fine, unobtrusive, becoming finer or even hardly detectable apically. Shape of body in Fig. 2, dorsal view on head in Fig. 4, body parts ventrally in Figs. 5-7, tarsal tenent setae in Fig. 8. Lateral branches of operculum well visible in dorsal view, reaching apex of penis (Figs 9, 24). Penis terminating in narrow parallel process. Parameres widened apically with weak but distinct apical emargination. Spermatheca in Fig. 36. Length 1.2-1.5 mm.*D. madagascarensis* Švec, 2004

Dermatohomoeus hirsutus sp. nov.

(Fig. 10)

Type material. Holotype (♂): “ABT / Sept.2011/08 Madagascar / Ambohitantely Spec. Res.; 2.ix./ 2011; S18°10'52.3"E47°1721.3"/ 1493 m; sifting forest litter (bamboo / *Pandanus*); Winkler app. extraction/ L. S. Rahanitriniaina lgt.”, (MZMB). Paratypes: (1 ♂): the same data; (1 ♂): “ABT / Sept.2011 / 27 Madagascar / Ambohitantely Spec. Res.; 6.ix. / 2011; S18°11'53.3"E47°17'11.2"/ 1602 m; sifting of forest litter under/ palm trees; Winkler app. extraction/ L. S. Rahanitriniaina lgt.”, (MZMB, ZSPC).

Description. Body length 2.8 mm in holotype. Length of body parts: head 0.3 mm, pronotum 0.8 mm, elytra 1.7 mm, antenna 0.8 mm, aedeagus 0.89 mm. Maximum width of head 0.7

mm, pronotum 1.6 mm, elytra 1.7 mm at basal third. Body surface matt, distinctly haired. Dorsum, including legs, chest-nut coloured, antennomeres AI-AII reddish, AIII-AIX gradually darkened to brown, AX and AXI a little lighter. Underside lightly chest-nut with darker mesoventral carina and metaventrite. Entire dorsum micro-sculptured.

Head. Dorsal surface of head with very distinct micro-strigosity formed by parallelograms oriented in various directions - longitudinally on vertex, obliquely on front, transversally on clypeus. Puncturation irregular, punctures distinctly developed, separated by 1-2 times their own diameter on frons, puncturation distinctly sparser on clypeus, anterior part of clypeus and vertex lacking punctures at all. LAII-AXI (AII = 1.0) = 1.0-1.5-0.8-0.9-0.8-1.2-0.5-1.0-1.0-1.3. WAII-AXI (AII = 1.0) = 1.0-0.7-0.5-0.7-0.7-1.0-0.8-1.5-1.8-2.0. W/LAII-AXI = 0.5-0.3-0.3-0.4-0.4-0.5-0.8-0.8-1.0-0.9.

Pronotum. Base emarginate before the acute closely rounded posterior angles. Posterior angles rectangular, pointed in lateral view. Dorsal surface of pronotum with distinct dense micro-strigosity formed by transversally oriented parallelograms. Pronotal puncturation very dense, only a little finer than those on head, punctures separated by about 1-2 times their diameter, larger than interspaces between strigosites. Setosity distinct, setae recumbent, longer than distance between punctures.

Elytra. Elytral surface covered by exceptionally long recumbent seta, each seta longer than distance between punctures, therefore punctured rows not detectable being almost covered by setae. Elytral puncturation dense, punctures predominantly separated by about 2-3 times their own diameter. Wide, very shallowly deepened longitudinal depressions disappearing anteriorly present on elytra. Thus elytral structure resembles flatly raised longitudinally oriented ribs. Surface covered by fine transverse zigzag unobtrusive strigosites separated by about 0.02 mm. Sutural stria extending approximately to basal third of elytra.

Mesoventrite, metaventrite. No specific characters detected.

Membranous wings developed.

Legs. Anterior tarsomere I dilated and elongate equipped with distinct tenent setae ventrally. Tarsomeres I-IV together approximately as long as TV without claws. Setae present but shorter and sparser also on TII-TIV. Mid-tarsomeres slim, TI-TIV similarly setose ventrally as in anterior tarsomeres.

Genitalia. Aedeagus of very characteristic shape in Fig. 10. Penis with long pointed process, lateral branches of the operculum slim and very elongate distally.

Variation. Body length 2.7-3.0 mm. The colour of dorsum varies from yellow-reddish to chest-nut. Ratio of length AIII/AII varies between 1.1-1.5.

Female. Unknown.

Differential diagnosis. *Dermatohomoeus hirsutus* sp. nov. differs from all the species of the genus, not only from the species from Madagascar, by obtrusively hairy surface of the dorsum. Body size of the new species is larger than any of the other species known from Madagascar. Also the shape of the aedeagus with penis terminating in long thin process is unique in the genus in the combination with curved, long and thin lateral branches of operculum.

Etymology. The name of the new species refers to the unusually obtrusively haired dorsal surface of the species (Latin *hirsutus* - hairy).

***Dermatohomoeus operculatus* sp. nov.**

(Figs. 14, 28)

Type material. Holotype (♂): “RNF / Sept.2012 / 02 / Madagascar, Ranomafana / N.P.; 27.ix.2012, S21°15'40.4'' / E47°25'14.5''; 994 m, sifting litter /, Ambatolahidimy; Winkler / app. extr.; L.S. Rahanitriniaina lgt.” (MZMB). Paratypes (3 ♂♂, 4 ♀♀): the same data; (1 ♂, 2 ♀♀): “ Madagascar - CE 2010 / Ranomafana N.P.; 16.-18.xi. / S21°14'51''E47°24'' / 1079 m sifting; P. Bañar lgt.”; (3 ♂♂, 2 ♀♀): RNF / 16 / 2011 Madagascar / Ranomafana N.P.; 16.iv.2011 / S21°14'57.9''47°24'22.9''138 m / sifting litter; Winkler app. extr.; L.S. / Rahanitriniaina & R. Raveloson lgt.”; (MZMB, ZSPC).

Description. Body length 2.2 mm in holotype. Length of body parts: head 0.3 mm, pronotum 0.6 mm, elytra 1.3 mm, antenna 0.7 mm, aedeagus 0.65 mm. Maximum width of head 0.5 mm, pronotum 1.3 mm, elytra 1.4 mm at basal third.

Dorsum brown-black with reddish lateral margins, base and hind angles. Antennomeres AI-III and AIX-AXI reddish, AIV-AVIII gradually darkened to brown. Femora and tibiae chest-nut, tarsi reddish. Underside dark chest-nut with darker mesoventral carina. Almost entire dorsum micro-sculptured.

Head. Dorsal surface of head smooth except of puncturation, micro-sculpture present on vertex only consisting of parallelogram oriented medio-laterally. Puncturation irregular, punctures distinctly developed between eyes, separated by 2-3 times their own diameter. Some areas of head dorsum lack puncturation at all, namely vertex and clypeus. Head with several shallow depressions - on vertex, near eyes and posteriorly behind clypeus. LAII-AXI (AII = 1.0) = 1.0-1.2-0.7-0.7-0.7-0.9-0.4-0.7-0.7-1.2. WAI-AXI (AII = 1.0) = 1.0-0.6-0.6-0.6-0.6-1.0-0.8-1.6-2.0-2.0. W/LAII-AXI = 0.5-0.2-0.4-0.4-0.4-0.5-1.0-1.0-1.3-0.8.

Pronotum. Base emarginate before acute, closely rounded, posterior angles. Posterior angles acute, closely rounded also in lateral view. Dorsal surface of pronotum with fine micro-strigosity formed by transversally oriented parallelograms. Pronotal puncturation sparse, fine, much sparser and finer than those on head, punctures separated by about 7-8 times their diameter on disc. Several large punctures irregularly disseminate on disc.

Elytra. Elytral surface punctured. Larger punctures arranged in double rows. Row punctures separated predominantly by about 3 times their diameter transversally and longitudinally. Punctures equipped with very fine and short, unobtrusive recumbent, posteriorly oriented setae. Intervals between double rows possess finer and smaller punctures forming two irregular incomplete rows. Interval punctures separated by about 4-5 times their diameter. Double rows located in wide, very shallowly deepened longitudinal depressions that disappear on anterior half of elytral length. Thus intervals resemble flatly raised ribs. Surface covered by fine transverse zigzag strigosities separated by about 0.03 mm. Sutural stria extending approximately to basal third of elytra.

Legs. Anterior tarsomere I dilated and elongate equipped with distinct tenent setae ventrally. Tarsomeres I-IV together longer than TV without claws. L ratio of TI-IV/TV = 1.5. Setae shorter and sparser on TIII-TIV. Mid-tarsomeres slim, TI-TIV similarly setose ventrally as in anterior tarsomeres.

Mesoventrite. Without specific characters.

Metaventrite. With longitudinal shallow depression in its posterior half.

Membranous wings developed.

Genitalia. Aedeagus as in Fig. 14.

Variability. Body length 2.0-2.3 mm. The colour of dorsum varies from yellow-reddish to black with lighter base and hind angles of pronotum and a narrow strip along the suture. Also the colour of antenna varies. Antenna paler from AI to AIV or even AV was detected in some of the paratypes. Therefore only AVII and AVII are dark in some paratypes. The micro-sculpture of dorsum varies a little. One of the paratypes possesses its head entirely micro-sculptured. Micro-sculpture is very weak and fine on the anterior half of pronotum in one of the paratypes. LAIII/AII varies between 1.2-1.3, L ratio of TI-TIV/TV varies between 1.5-1.8 in the males of the type series while the same is 1.2-1.3 in females. Anterior tarsi slender in females. Length of spermatheca 0.14 mm (Fig. 28).

Differential diagnosis. The new species is most similar to *D. annae* Švec, 2004 especially in its colour of dorsum and pronotal structures, length of parameres and general appearance of the aedeagus. It differs from the compared species by smaller body, mostly irregularly arranged interval punctures on the elytra and wider top of the penis. The new species differs from all Malagasy known species also by the unique shape of the operculum possessing two twisted, apically rounded, branches on each side.

Etymology. The name of the new species refers to the uniquely shaped operculum.

***Dermatohomoeus banari* sp. nov.**

(Figs. 16, 30)

Type material. Holotype (♂): "MDA / Jan.2015 /02 N Madagascar / Montagne d'Ambre ~940 m / circuit „Ampijoroana"; sifting litter / Winkler app. extraction; 7.1.2015/ P. Baňar & E.M. Rabotson lgt.", (MZMB). Paratypes (1 ♂, 4 ♀♀): "MDA / Jan.2015 / 12 N / Madagascar, Montagne / d'Ambre ~1100 m sifting litter close to / camp, 16.1.2015, Winkler/ apparatus extraction / P. Baňar & E.M. Rabotson lgt.", (MZMB, ZSPC).

Description. Body length in holotype 1.7 mm. Length of body parts: head 0.2 mm, pronotum 0.5 mm, elytra 1.0 mm, antenna 0.6 mm, aedeagus 0.48 mm. Maximum width of head 0.5 mm, pronotum 1.1 mm, elytra 1.1 mm closely behind shoulders.

Dorsum dark chest-nut with reddish pronotal base, shoulders and lateral margins of elytra.

Antennomeres AI and AII yellowish, AIII-AIX yellow-brown, AX and AXI yellowish.

Legs chest-nut. Underside dark chest-nut. Almost entire dorsum micro-sculptured.

Head. Dorsal surface of head smooth except of puncturation and micro-sculptured vertex. Micro-sculpture consisting of parallelograms oriented medio-laterally. Punctures distinctly developed separated by 2-3 times their own diameter. Two large punctures located on vertex. Head with shallow depression on each side behind clypeus. LAII-AXI (AII = 1.0) = 1.0-1.0-0.6-0.6-0.6-0.9-0.5-0.8-0.8-1.2. WAII-AXI (AII = 1.0) = 1.0-0.6-0.6-0.6-0.6-1.0-0.8-1.6-1.8-1.6. W/LAII-AXI = 0.5-0.3-0.5-0.5-0.5-0.6-0.8-1.0-1.1-0.7.

Pronotum. Base emarginate before acute, closely rounded, posterior angles. Posterior angles blunt, closely rounded in lateral view. Pronotum with shallow depression on each side oriented medio-laterally. Very fine micro-strigosity formed by transversally oriented parallelograms present near base, micro-sculpture lacking on disc and anterior part of pronotum. Puncturation sparse, fine, much sparser and finer than that on head. Punctures separated by about 4-6 times their diameter on basal half of pronotum, by 6-8 times their diameter in anterior part of pronotum. Several large punctures irregularly disseminate on pronotal surface.

Elytra. Elytral surface punctured. Larger punctures arranged predominantly in double rows reduced in simple rows in some places. Row punctures separated by about 2 times their diameter transversally and longitudinally. Punctures equipped with very fine and short, unobtrusive recumbent, usually posteriorly oriented setae. Intervals between double rows possess distinctly finer and smaller punctures separated by about 4-5 times their diameter. Double rows located in wide, very shallowly deepened longitudinal depressions that disappear anterad. Thus intervals resemble flatly raised ribs. Surface covered by fine transverse zigzag strigosities separated by about 0.03 mm. Sutural stria extending approximately to basal third of elytra.

Legs. Anterior tarsomere I dilated and elongate equipped with distinct tenent setae ventrally. Tarsomeres I-IV together as long as TV without claws. Setae shorter and sparser on TIII-TIV. Mid-tarsomeres slim, TI-TIV similarly setose ventrally as in anterior tarsomeres.

Mesoventrite. Without specific characters.

Metaventrite. With longitudinal shallow depression in its posterior half.

Membranous wings developed.

Genitalia. Aedeagus as in Fig. 16.

Variability. Body length 1.7-2.0 mm. One of the paratypes yellow-reddish, the same specimen with micro-sculpture on entire dorsum of pronotum. Also the colour of antenna varies. Medio-lateral pronotal depression divided in two depressions on each side in one of the paratypes. Antenna lightly coloured from AI to AIV in one of the paratypes. LAIII/AII varies between 1.0-1.2. L ratio of TI-TIV/TV varies between 1.0-1.3 in both the male and female specimens. Anterior tarsi slender in females. Length of spermatheca 0.12 mm (Fig. 30).

Differential diagnosis. *Dermatohomoeus banari* sp. nov. is most similar to *D. similis* Švec, 2004 in the size of its body, shiny surface, in its colour of dorsum and pronotal structures, length of parameres and general appearance of the penis. The new species differs from the compared species by well developed double punctured rows on elytra, much smaller and finer interval punctures on the elytra than punctures arranged in principal double rows. The new species differs from *D. similis* also by parameres obtrusively widened apically exceeding penis.

Etymology. The new species is dedicated to one of the collectors, my friend, curator in the Moravian Museum in Brno, Petr Baňář.

***Dermatohomoeus parameralis* sp. nov.**

(Figs. 18, 31)

Type material. Holotype (♂): “VOH / June2012 / 01 Madagascar / Beforona commune, Vohidrazana/ forest; 6.vi.2012, 1153 m, sifting litter / S18°58'33.5"E48°30'57.2", Winkler / app. extraction; L.S.Rahanitriniaina / & E.M. Rabotoson lgt.” (MZMB). Paratypes (3 ♂♂, 1 ♀): the same data (MZMB, ZSPC); (1 ♂): “ASB / Jan.2015 / 30 C Madagascar / Andasibe-Mantadia N.P.; 29.1.2015 / Mantadia, circuit „Rianaso“, path to / Chute sacrée, S18°50'07"E48°26'22“ / sifting litter, Winkler app. extr. / P. Baňář & E.M. Rabotoson lgt.” (MZMB); (5 ♂♂, 5 ♀♀): “VOH / Aug.2012 / 05 Madagascar / Réserv. Expérimentale de Vohimana / „Circuit 4, bivouac“; 20.viii.2012 / S18°55'07.8"E48°29'6.6"; 937 m / sifting litter; Winkler app. extr.; L.S. / Rahanitriniaina & E.M. Rabotoson lgt.”; (MZMB, ZSPC).

Description. Body length 1.7 mm in holotype. Length of body parts: head 0.2 mm, pronotum 0.5 mm, elytra 1.0 mm, antenna 0.5 mm, aedeagus 0.48 mm. Maximum width of head 0.5 mm, pronotum 0.9 mm, elytra 1.0 mm closely behind shoulders.

Dorsum chest-nut with reddish pronotal base. Antennomeres unicolorous, reddish-brown. Tarsi light chest-nut coloured. Underside chest-nut. Dorsum partly micro-sculptured.

Head. Dorsal surface of head smooth except of puncturation and micro-sculpture on vertex. Micro-sculpture consisting of irregular parallelograms oriented medio-laterally. Punctures distinctly developed separated by 1-3 times their own diameter on front, puncturation sparser anteriorly. Pair of large punctures located on vertex, two large punctures laterally behind clypeal line. LAII-AXI (AII = 1.0) = 1.0-0.8-0.4-0.4-0.4-0.6-0.3-0.7-0.7-1.1. WAII-AXI (AII = 1.0) = 1.0-0.6-0.4-0.4-0.4-0.8-0.6-1.4-1.6-1.8. W/LAII-AXI = 0.6-0.4-0.5-0.5-0.5-0.8-1.0-1.2-1.3-0.9.

Pronotum. Base weakly emarginate before acute, rounded, posterior angles. Posterior angles acute, rounded also in lateral view. Pronotum with very shallow hardly detectable depression, oriented medio-laterally, on each side close to hind angles. Micro-sculpture not developed. Puncturation distinct, but sparser and finer than that on head. Punctures separated by about 4-5 times their diameter on basal half of pronotum, puncturation getting sparser anteriorly. Several large punctures irregularly disseminate on pronotal surface.

Elytra. Elytral surface punctured. Larger punctures arranged in double rows. Row punctures separated predominantly by about 3 times their diameter transversally and longitudinally. Punctures equipped with very fine and short, unobtrusive recumbent, usually posteriorly oriented setae. Intervals between double rows possess distinctly finer and smaller punctures separated by about 4-5 times their diameter. Interval punctures tend to form longitudinal row. Surface covered by fine transverse zigzag strigosities separated by about 0.03 mm. Sutural stria extending approximately to basal fourth of elytra. Transverse strigosities not detectable on epipleura.

Legs. Anterior tarsomere I dilated and elongate equipped with distinct tenent setae ventrally. Tarsomeres I-IV together 1.2 times as long as TV without claws. Setae shorter and sparser on TII-TIV. Mid-tarsomeres slim, TI-TIV similarly setose ventrally as in anterior tarsomeres.

Mesoventrite. Without specific characters.

Metaventrite. With longitudinal shallow depression in its posterior half.

Membranous wings developed.

Genitalia. Aedeagus as in Fig. 18.

Variability. Body length 1.4-1.7 mm. The colour of antenna varies a little. The antennomeres I-VI a little lighter coloured than rest of antenna. LAIII/AII varies between 0.8-1.0. L ratio of TI-TIV/TV varies between 1.2-1.3 in males, 0.8-1.0 in female specimens. Anterior tarsi slender in females. Length of spermatheca 0.13 mm (Fig. 31).

Differential diagnosis. *Dermatohomoeus parameralis* sp. nov. belongs to the group of seven species (in Madagascar) with shiny, not micro-sculptured, pronotum. It is most similar to *D. lobatus* sp. nov. in the densely punctured entire dorsal surface of pronotum and by very similar elytral sculpture with distinct double rows of puncture and distinctly smaller punctures in the intervals. The new species differs from *D. lobatus* by the last antennal segment that is wider than the previous while it is narrower than the antennomere X in the compared species. The new species differs from *D. lobatus* and from all other known species of the genus by the specifically widened and curved top of the parameres.

Etymology. The name of the new species attracts the attention to the very specific shape of parameres.

***Dermatohomoeus lobatus* sp. nov.**

(Fig. 19)

Type material. Holotype (♂): "Madagascar - CE / Ranomafana N.P. 17.xi. / 2010; ~960 m; sifting by / stream close to main / entrance; P. Bañar lgt." (MZMB). Paratype: (1 ♂): the same data, (ZSPC).

Description. Body length 2.0 mm in holotype. Length of body parts: head 0.2 mm, pronotum 0.5 mm, elytra 1.3 mm, antenna 0.7 mm, aedeagus 0.55 mm. Maximum width of head 0.5 mm, pronotum 1.1 mm, elytra 1.2 mm closely behind shoulders.

Dorsum dark chest-nut with reddish pronotal base and strip along elytral suture lighter. Legs reddish, tarsi lighter. Antennomeres AI-AVI yellow-red, AVII-AX yellow-brown, apical third of AXI lighter. Underside light chest-nut, mesoventral carina and anterior metaventral process darker. Dorsum partly micro-sculptured.

Head. Majority of head dorsal surface smooth except of puncturation. Micro-sculpture present on vertex and clypeus, consisting of irregular parallelograms oriented medio-laterally. Punctures distinctly developed separated by 2-3 times their own diameter. LAII-AXI (AII = 1.0) = 1.0-1.0-0.7-0.6-0.6-0.9-0.4-0.8-0.9-1.3. WAI-AXI (AII = 1.0) = 1.0-0.8-0.8-0.8-0.8-1.5-1.3-2.0-2.8-2.5. W/LAII-AXI = 0.4-0.3-0.4-0.5-0.5-0.8-1.3-1.0-1.2-0.6.

Pronotum. Base very weakly emarginate before acute, acutely rounded, posterior angles. Posterior angles rectangular in lateral view. Micro-sculpture not developed. Puncturation much sparser and finer than that on head. Punctures separated by about 4-6 times their diameter. Several large punctures irregularly disseminate on pronotal surface.

Elytra. Elytral surface punctured. Larger punctures arranged in double rows. Row punctures separated predominantly by about 2 times their diameter transversally and longitudinally. Punctures equipped with very fine and short, unobtrusive recumbent, usually

posteriorly oriented setae. Intervals between double rows possess distinctly finer and smaller punctures separated by about 4-6 times their diameter. Interval punctures tend to form irregular longitudinal row. Surface covered by fine transverse zigzag strigosities separated by about 0.01 mm. Sutural stria extending approximately to third of elytra.

Legs. Anterior tarsomere I dilated and elongate equipped with distinct tenent setae ventrally. Tarsomeres I-IV together 1.3 times as long as TV without claws. Setae shorter and sparser on TIII-TIV. Mid-tarsomeres slim, TI-TIV similarly setose ventrally as in anterior tarsomeres.

Mesoventrite. Without specific characters.

Metaventrite. With longitudinal shallow depression in its posterior half.

Membranous wings developed.

Genitalia. Aedeagus as in Fig. 19.

Female. Unknown.

Variability. Body length 1.8-2.0 mm. LAIII/AII varies between 1.0-1.2.

Differential diagnosis. *Dermatohomoeus lobatus* sp. nov. belongs to the group of seven Malagasy species with shiny, not micro-sculptured, pronotum. It is most similar to *D. parameralis* sp. nov. in the densely punctured entire dorsal surface of pronotum and by very similar elytral sculpture with distinct double rows of puncture and distinctly smaller punctures in the intervals. The new species differs from *D. parameralis* by the last antennal segment that is narrower than the previous while it is wider than the antennomere X in the compared species. The new species differs from *D. parameralis* also by the slim parameres lacking any obtrusive specific characters.

Etymology. The name of the new species refers to the very specific shape of the distal part of parameres resembling lobes (from Latin *lobatus* - lobulated).

***Dermatohomoeus montanus* sp. nov.**

(Figs. 20, 32)

Type material. Holotype (♂): "MDA / Jan.2015 / 11 N / Madagascar Montagne / d'Ambre ~945 m, circuit / „Sommet“, S12°31'28" / E49°09'52" sifting litter+rotten wood, / Winkler app. extr.14.1.2015, P. Bañar / & E.M. Rabotoson lgt." (MZMB). Paratypes (10 ♀♀): the same data, (MZMB, ZSPC).

Description. Body length 2.4 mm in holotype. Length of body parts: head 0.3 mm, pronotum 0.6 mm, elytra 1.5 mm, antenna 0.8 mm, aedeagus 0.71 mm. Maximum width of head 0.6 mm, pronotum 1.4 mm, elytra 1.5 mm at basal third.

Dorsum, including legs, yellow-red, antennomeres AI-AII yellow, AIII-AIX gradually darkened to brown, AX-XI yellowish. Underside lightly chest-nut with darker mesoventral carina. Entire dorsum micro-sculptured and punctured.

Head. Dorsal surface of head with very distinct micro-strigosity formed by parallelograms oriented in various directions - longitudinally on vertex, obliquely on frons, transversally on

clypeus. Puncturation irregular, punctures distinctly developed, separated by 5-7 times their own diameter. Two large punctures located on each side behind clypeus, another pair of large punctures between eyes. LAII-AXI (AII = 1.0) = 1.0-1.1-0.8-0.7-0.8-1.1-0.5-0.9-0.9-1.2. WAII-AXI (AII = 1.0) = 1.0-0.8-0.6-0.8-0.8-1.4-1.2-1.8-2.0-2.0. W/LAII-AXI = 0.5-0.3-0.3-0.5-0.4-0.6-1.2-0.9-1.0-0.8.

Pronotum. Base emarginate before the acute closely rounded posterior angles. Posterior angles rectangular, pointed in lateral view. Dorsal surface of pronotum with distinct microstrigosity formed by transversally oriented parallelograms. Pronotal puncturation sparse, fine, much sparser and finer than those on head, punctures separated by about 8-10 times their diameter on disc, distinctly denser and larger toward lateral margins. Several large punctures irregularly disseminate on disc.

Elytra. Elytral surface punctured. Larger punctures arranged in double rows. Row punctures separated predominantly by about 1-2 their diameter transversally and longitudinally. Punctures equipped with very fine and short, unobtrusive recumbent, posteriorly oriented setae. Intervals between double rows possess finer and smaller punctures. Interval punctures separated by about 3-4 times their diameter, arranged irregularly. Double rows located in wide, very shallowly deepened longitudinal depressions that disappear anteriorly. Thus intervals resemble flatly raised ribs. Surface covered by fine transverse zigzag strigosities separated by about 0.03 mm. Sutural stria extending approximately to basal third of elytra.

Legs. Anterior tarsomere I dilated and elongate equipped with distinct tenent setae ventrally. Tarsomeres I-IV together a little longer than TV without claws. L ratio of TI-TIV/TV = 1.2. Setae shorter and sparser on TII-TIV. Mid-tarsomeres slim, TI-TIV similarly setose ventrally as in anterior tarsomeres.

Mesoventrite. No specific characters detected.

Metaventrite. Metaventrite with longitudinal shallow depression in its posterior half.

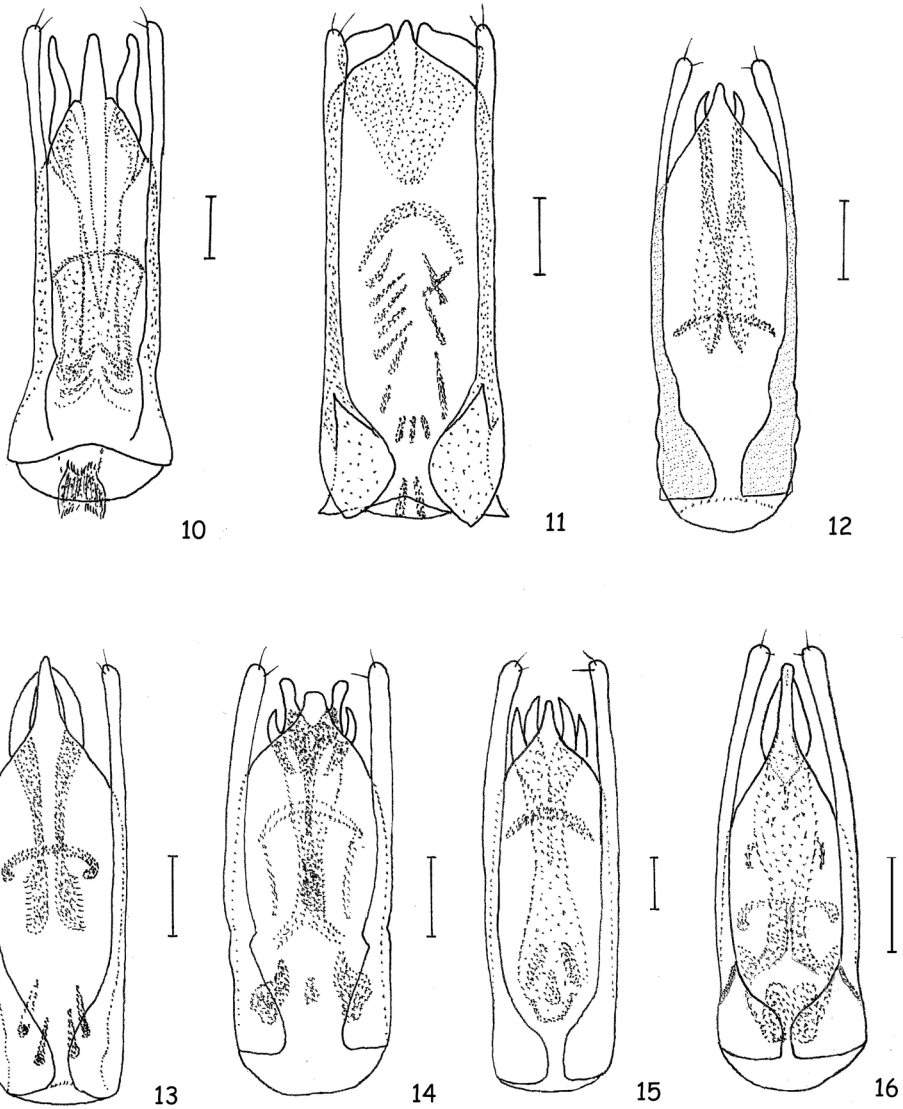
Membranous wings developed.

Genitalia. Aedeagus as in Fig. 20.

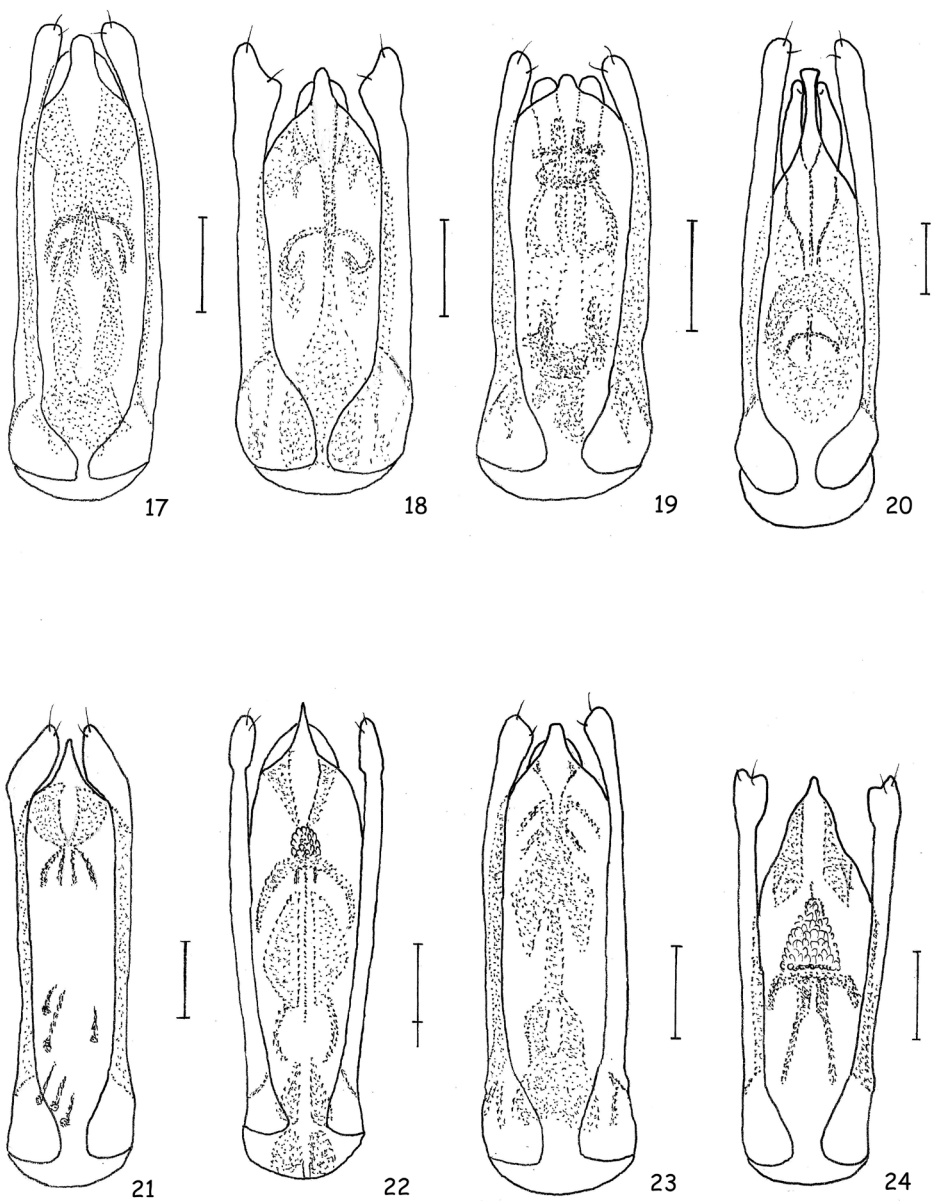
Variability. Body length 2.2-2.4 mm. The colour of dorsum varies from yellow-reddish to chest-nut. LAIII/AII varies between 1.1-1.3, L ratio of TI-IV/TV varies between 1.1-1.2 in the type series. Anterior tarsi slender in female. Length of spermatheca 0.17 mm (Fig. 32).

Differential diagnosis. *Dermatohomoeus montanus* sp. nov. belongs to the group of seven Malagasy species having pronotum without strigosity (see the key above). From the morphologically similar species it differs by large body size (2.2-2.4 mm) as the size of the other species is 1.2-1.9 mm. The shape of the aedeagus is very specific having penis widened apically and wide, long sub-parallel lateral operculum branches. These characters differ *D. montanus* sp. nov. from all other known species occurring in Madagascar.

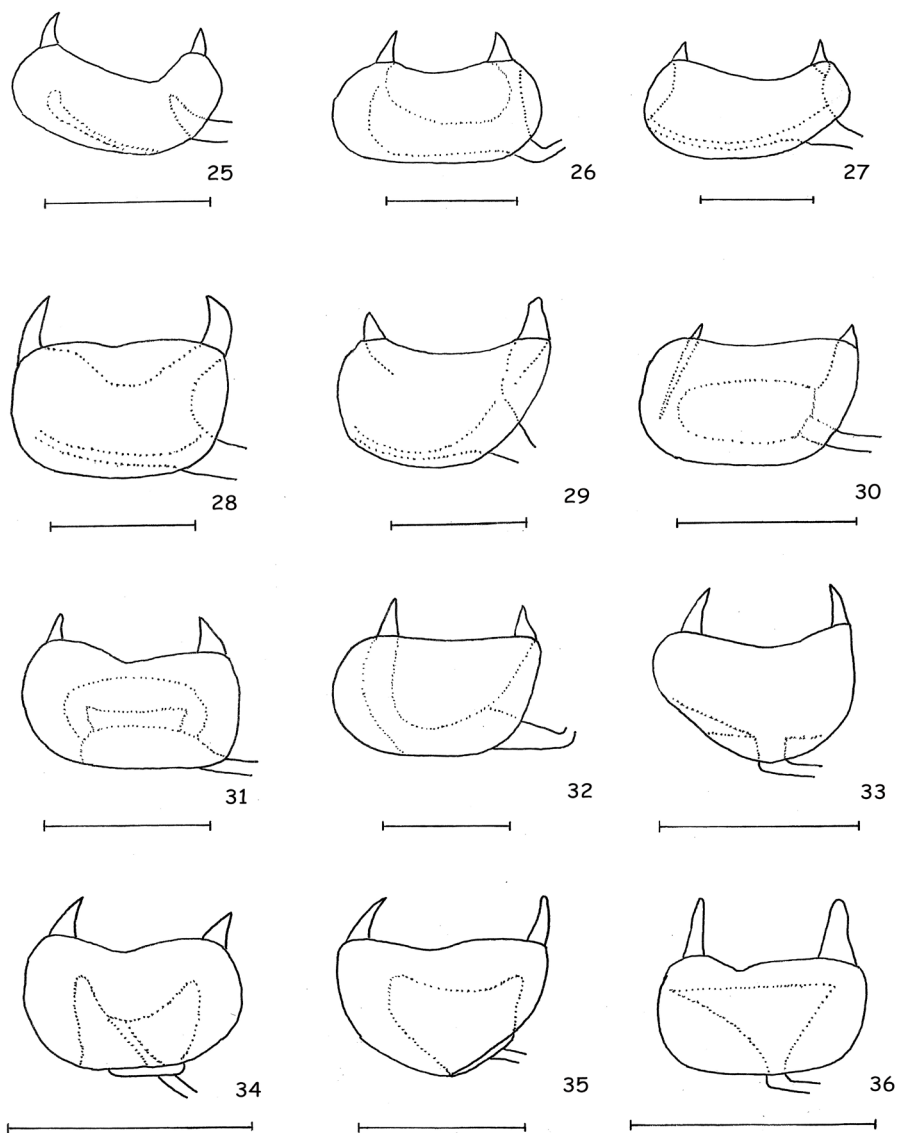
Etymology. The name of the new species remembers that the type specimens were collected in the mountains (from Latin *montanus* - mountain).



Figs. 10-16. Aedeagus, dorsal view: 10- *Dematohomoeus hirsutus* sp. nov.; 11- *D. angelinii* Švec, 2004; 12- *D. micropunctatus* Švec, 2004; 13- *D. similis* Švec, 2004; 14- *D. operculatus* sp. nov.; 15- *D. annae* Švec, 2004; 16- *D. banari* sp. nov. Scale = 0.1 mm.



Figs. 17-24. Aedeagus, dorsal view: 17- *Dermatohomoeus* sp. in press; 18- *D. parameralis* sp. nov.; 19- *D. lobatus* sp. nov.; 20- *D. montanus* sp. nov.; 21- *D. ferrugineus* Švec, 2004; 22- *D. bulirschi* Švec, 2004; 23- *D. brevipterus* sp. nov.; 24 - *D. madagascarensis* Švec, 2004. Scale = 0.1 mm.



Figs. 25-36. Spermatheca: 25- *Dermatohomoeus angelinii* Švec, 2004; 26- *D. micropunctatus* Švec, 2004; 27- *D. similis* Švec, 2004; 28- *D. operculatus* sp. nov.; 29- *D. annae* Švec, 2004; 30- *D. banari* sp. nov.; 31- *D. parameralis* sp. nov.; 32- *D. montanus* sp. nov.; 33- *D. ferrugineus* Švec, 2004; 34- *D. bulirschi* Švec, 2004; 35- *D. brevipterus* sp. nov.; 36- *D. madagascarensis* Švec, 2004. Scale = 0.1 mm.

Dermatohomoeus brevipterus sp. nov.

(Figs. 23, 35)

Type material. Holotype (♂): “ASB / May2011 / 01 Madagascar / Andasibe N.P.; ‘Belle vue’; 2.v. / 2011; S18°56′51.5″E48°25′31.8″ / 1029 m; sifting forest litter; Winkler /, app. extr.; L.S. Rahanitriniaina lgt.” (MZMB). Paratypes (2 ♀♀): the same data; (2 ♂♂): “VOH / Nov.2011 / 02 Madagascar / Réserve Expérimentale de Vohimana; 27.xi.2011; S18°55′13.6″ / E48°30′57.9″; 772 m; sifting forest / litter in rock ravine; Winkler app. extr. / L.S. Rahanitriniaina & P. Bañaf lgt.”; (3 ♂♂, 1 ♀): “VOH / Aug.2012 / 13 Madagascar / Réserv. Expérimentale de Vohimana / „Circuit 3“; 23.viii.2012 / S18°54′56.1″E48°30′13.5″; 903 m / sifting litter; Winkler app. extr.; L.S. / Rahanitriniaina & E.M. Rabotoson lgt.”; (1 ♂, 3 ♀♀): ASB / 07 / 2011 Madagascar / Andasibe N.P.; 11.iv.2011 / S18°56′505″E48°25′224″; 947 m / sifting in shallow ravine, Winkler / app. ext. L.S. Rahanitriniaina lgt.”; (4 ♂♂, 3 ♀♀): “VOH / June2012 / 04 Madagascar / Beforona commune, Ranomena / forest; 7.vi.2012, 1088 m, sifting litter / S18°58′27.5″E48°30′27.1″ Winkler / app. extraction; L.S.Rahanitriniaina / & E.M. Rabotoson lgt.”; (1 ♂, 1 ♀): “VOH / June2012 / 06 Madagascar / Beforona commune, 10.vi.2012 / Ambatondralanga, sifting litter / S18°54′31.2″E48°30′10.8″, 903 m / Winkler app. extraction; L.S.Raha- / nitriaina & E.M. Rabotoson lgt.”; (28 ♂♂, 18 ♀♀): “Madagascar - CE ANDASIBE N.P. 3.-6.XI. 2010 „Circuit Indri 2“, lifting, P.Bañaf & L.S.Rahanitriniaina lgt.”; (1 ♂): “ABT / 10 / 2011 Madagascar 2011 / Ambohitantely Spec. Res.; 19.iv. / S18°11′39.2″E47°17′12.6″, 1674 m / sifting of plant residues under / *Pandanus*; Winkler app. extr.; L.S. / Rahanitriniaina & R. Raveloson lgt.”; (1 ♂): ASB / Jan.2015 / 28 C Madagascar / Andasibe-Mantadia N.P.; 28.1.2015 / Mantadia, circuit „Tsakoka“, sifting / litter by big tree, Winkler app. extr. / P. Bañaf & E.M. Rabotoson lgt., (MZMB, ZSPC).

Description. Body length 1.5 mm in holotype. Length of body parts: head 0.1 mm, pronotum 0.5 mm, elytra 0.9 mm, antenna 0.5 mm, aedeagus 0.52 mm. Maximum width of head 0.4 mm, pronotum 0.9 mm, elytra 0.9 mm at shoulders.

Dorsum red-brown, clypeus and posterior angles of pronotum lighter coloured, antennomeres brown with AII yellowish, legs brown with lighter tarsi. Underside chest-nut with darker mesoventral carina. Dorsum partly micro-sculptured.

Head. Dorsal surface of head with very distinct micro-strigosity formed by irregular parallelograms oriented predominantly medio-laterally developed on vertex and antero-laterally on frons near medial margin of eyes. Puncturation distinctly developed, punctures strong, separated by 2-4 times their own diameter. Two large punctures located between eyes. Antennomere AIII shorter than AII. LAII-AXI (AII = 1.0) = 1.0-0.9-0.8-0.6-0.5-0.8-0.4-0.8-0.8-1.3. WAII-AXI (AII = 1.0) = 1.0-0.5-0.5-0.5-0.8-1.3-1.0-1.8-2.0-2.0. W/LAII-AXI = 0.5-0.3-0.3-0.5-0.4-0.8-0.8-1.3-1.2-0.8.

Pronotum. Base distinctly emarginate before the acute closely rounded posterior angles. Posterior angles acute, closely rounded also in lateral view. Dorsal surface of pronotum without any micro-sculpture. Pronotal puncturation moderately dense, sparser and finer than that on head, punctures separated by about 4-8 times their diameter. Several large punctures irregularly disseminate on disc.

Elytra surface punctured. Larger punctures arranged in double rows. Row punctures separated predominantly by about 1-2 their diameter transversally and longitudinally. Punctures equipped with very fine and short, unobtrusive recumbent, posteriorly oriented setae. Intervals between double rows possess finer and smaller punctures. Interval punctures separated by about 4-7 times their diameter, arranged irregularly. Surface covered by fine transverse zigzag strigosities separated by about 0.03 mm. Sutural stria extending approximately to basal third of elytra. Epipleura with very sparse fine transversal strigosities.

Legs. Anterior tarsomere I dilated and elongate equipped with distinct tenent setae ventrally. Tarsomeres I-IV together twice as long as TV without claws. L ratio of TI-TIV/TV = 2.1. Setae shorter and sparser on TII-TIV. Mid-tarsomeres slim, TI-TIV similarly setose ventrally as in anterior tarsomeres.

Mesoventrite. No specific characters detected.

Metaventrite. Metaventrite with longitudinal shallow depression in its posterior half.

Membranous wings reduced, approximately half as long as elytra.

Genitalia. Aedeagus as in Fig. 23. Penis terminates in short slim process. Distal part of lateral branches of operculum not visible in dorsal view.

Variability. Body length 1.3-1.9 mm. The colour of dorsum varies from yellow-reddish to chest-nut, colour of antenna from yellow-red to brown with AII or AIII lighter. Membranous wings shortened, variable in their length, as long as elytra in some paratypes. Puncturation sparser on pronotum in some of the paratypes, punctures separated approximately up to 10 times their diameter there. L ratio of TI-TIV/TV varies between 1.6-2.1 in the type series. Extremity of lateral branches of the operculum partly visible as longitudinal narrow small lobes on each side of penis in dorsal view in some of the paratypes. Anterior tarsi slender in female. Length of spermatheca 0.12 mm (Fig. 35).

Differential diagnosis. *Dermatohomoeus brevipterus* sp. nov. is most similar to the Malagasy species *D. madagascarensis* Švec, 2004, having pronotum rather sparsely punctured without any strigosity, possessing double rows of densely arranged punctures while punctures of elytral intervals are smaller and sparser. The new species differs by the strigosities uniformly developed on entire surface of elytra, while *D. madagascarensis* possess elytral strigosities unobtrusive, becoming finer or even hardly detectable apically. The shape of the aedeagus is of specific shape possessing small, semi-conical process on top of penis, with lateral branches of operculum hardly or even not at all detectable in dorsal view and not reaching apex of penis in *D. brevipterus* sp. nov. On the other hand lateral branches of operculum are well visible in dorsal view, reaching top of narrow parallel apical process of penis in *D. madagascarensis*. Also the shape of the parameral apices differ in both compared species.

Etymology. The species name *brevipterus* is derived from Latin *brevis* - short and the suffix *-ptera* comes from Latin word *pteron* -wing, The name refers to the short membranous wings in the holotype and other specimens of the type series.

REVIEW OF THE DISTRIBUTIONAL DATA

New distributional data of the genus *Dermatohomoeus* in Madagascar (older data see Švec 2004)

species	collecting sites /month and year of collecting	+ less than 10 specimens in the sample ++ more than 10 specimens
<i>D. hirsutus</i> sp. nov.	ABT/September 2011	+
<i>D. micropunctatus</i> Švec, 2004	RNF/September 2012	+
	MDA/January 2015	++
	MFR/January 2015	+
<i>D. similis</i> Švec, 2004	RNF/September 2012	++
	ABT/January 2017	++
<i>D. operculatus</i> sp. nov.	RNF/September 2012	+
	RNF/November 2010	+
	RNF/April 2011	+
<i>D. annae</i> Švec, 2004	ABT/April 2011	++
	ABT/September 2011	+
	VOH/June 2012	++
	VOH/August 2012	++
	RNF/September 2012	++
	ASB/January 2015	+
	MDA/January 2015	++
	MTD/January 2017	++
ABT/January 2017	+	
<i>D. banari</i> sp. nov.	MDA/January 2015	+
<i>Dermatohomoeus</i> in press (see References)	AKF/April 2011	+
	AKF/January 2015	++
<i>D. parameralis</i> sp. nov.	VOH/June 2012	+
	VOH/August 2012	++
	ASB/January 2015	+
<i>D. lobatus</i> sp. nov.	RNF/November 2010	+
<i>D. montanus</i> sp. nov.	MDA/January 2015	++
<i>D. bulirschi</i> Švec, 2004	ISL/January 2013	++
	ISL/January 2015	++
	ZOM/January 2013	++
	MDA/January 2015	+
<i>D. brevipterus</i> sp. nov.	ASB/May 2011	+
	ASB/November 2010	++
	ASB/April 2011	+
	ABT/April 2011	+
	ASB/ January 2015	+
	VOH/November 2011	+
	VOH/August 2012	+
VOH/June 2012	+	
<i>D. madagascarensis</i> Švec, 2004	ASB/ January 2015	+

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