

Revision of the genera of the newly-established group of Madagascan
melanocratoid *Platynotina*
(Coleoptera: Tenebrionidae: *Platynotini*)

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ABSTRACT. A new group of melanocratoid *Platynotina* has been distinguished, including 8 endemic Madagascan genera, of which *Doyenus* (type species: *Doyenus uncus* sp. nov.), *Hovademulus* (type species: *Selinus punctipennis* FAIRMAIRE, 1902), *Pokryszkiella* (type species: *Pokryszkiella cornuta* sp. nov.) and *Sebastianus* (type species: *Melanocratus major* FAIRMAIRE, 1899) are new to the science. Fourteen species new to the science have been described: *Doyenus uncus*, *D. dentatus*, *Hovademulus ordinarius*, *H. tenuiculus*, *Melanocratus ferreri*, *M. fairmairei*, *Pokryszkiella cornuta*, *Sebastianus projectus*, *S. simplex*, *S. magnus*, *Styphacus phreneticus*, *S. kochi*, *S. nimius*, *S. bartolozzi*. The following new synonymies are proposed: *Melanocratus validipes* FAIRMAIRE, 1895 (= *Styphacus humerosus* FAIRMAIRE, 1901), *Styphacus decorsei* Fairmaire, 1901 (= *Melanocratus amplicollis* FAIRMAIRE, 1902, = *Melanocratus convexicollis* FAIRMAIRE, 1902). Key to species and genera is provided. Ovoviviparity has been demonstrated in the following species: *Melanocratus ferreri*, *M. validipes*, *Sebastianus projectus*, *Styphacus decorsei*, *S. kochi* and *S. neuter*.

Key words: Entomology, taxonomy, revision, new species, ovoviviparity, *Tenebrionidae*, *Platynotina*, Madagascar.

INTRODUCTION

In my earlier paper (IWAN 1995) I distinguished three groups of species and genera of the tribe *Platynotini*, occurring in Madagascar. One of them includes species of endemic Madagascan genera: *Melanocratus*, *Styphacus*, *Madobalus* and *Hovademus*, and *Selinus punctipennis* FAIRMAIRE, 1902. The species are very closely related to the African trigonopoid *Platynotina* - they have a broad, slightly concave

and somewhat rounded epipleura at the apex of elytra, whose bordering does not reach the apices of elytra and terminates at the level of the third abdominal ventrite.

The first recorded species of the group was *Melanocratus validipes*, described with the genus *Melanocratus* by FAIRMAIRE in 1895. FAIRMAIRE's later papers (1899, 1901, 1902) contained descriptions of more new genera and species: 1899 - *Melanocratus major*; 1901 - *Styphacus decorsei*, *S. humerosus*, *Madobalus rotundicollis*; 1902 - *Selinus punctipennis*, *Melanocratus amplicollis*, *M. ovoideus*, *M. neuter*, *M. convexicollis*. As I have already mentioned (IWAN 1995), KOCH's (1956) advertised paper on these genera has never appeared.

In 1970 ARDOIN described a new genus *Hovademus* with two species: *andringitrensis* and *pauliani*.

Till now the group included 4 genera with 12 species, all of them being Madagascan endemics.

The material examined is deposited in the following collections (curator names in parentheses):

JFC - Julio FERRER Collection, Stockholm, Sweden (J. FERRER).

HBC - Zoologisches Staatssammlung, München, Germany in permanent loan to Prof. H.J. BREMER (H. J. BREMER).

MGFT - Museum G. Frey, Tutzing, Germany (M. BRANCUCCI).

MNHN - Muséum National d'Histoire Naturelle, Paris, France (C. GIRARD).

MZUF - Museo Zoologico dell'Universita de Florenze, Florence, Italy (L. BARTOLOZZI).

NMB - National Museum, Bloemfontein, Republic of South Africa (J. IRISH).

TM - Transvaal Museum, Pretoria, South Africa (S. ENDRÓDY-YOUNGA).

TMB - Természetudományi Muzeum, Budapest, Hungary (O. MERKL).

Abbreviations:

pl/pb - pronotum length/breadth ratio;

el/eb - elytra length/breadth ratio;

el/pl - length ratio elytra/pronotum;

eb/pb - breadth ratio elytra/pronotum;

pl/al - length ratio pronotum/antenna;

ab/al - antenna breadth (third segment)/length ratio;

l.b.p. - length of basal part ofedeagal tegmen;

l.a.p. - length of apical part ofedeagal tegmen;

ft - segments of fore tarsi;

mt - segments of mid tarsi;

ht - segments of hind tarsi.

SYSTEMATICS

The structure of elytral epipleura is a distinct synapomorphy with a part of S African trigonopoid *Platynotina* and the above-mentioned Madagascan endemic

species. The latter are characterized by a very deep emargination of the clypeus anterior margin, which would indicate a distinctness of the group. The deep emargination of the clypeus anterior margin is a unique character within the *Platynotini*. It is present also in the genus *Anomalipus*, which is a monotypic member of the subtribe *Anomalipina*, characterized by a specific epipleuron and mentum structure (Koch 1956) which distinguish it from the remaining subtribes. In this connection the character discussed can be regarded as a synapomorphy of a part of the species of the genera *Melanocratus*, *Styphacus*, *Madobalus* and *Selinus punctipennis*, as well as new species described in this paper, uniting them in a monophyletic group of melanocratoid *Platynotina*.

All species of the melanocratoid *Platynotina* are wingless and have a narrow metasternum. The widely interrupted bordering of pronotum base in the genera *Hovademus*, *Hovademulus* and *Pokryszkiella* places them close to the New World genus *Opatrinus*, while the structure of anterior tibiae - close to trigonopoid *Platynotina*. The structure of anterior tibiae (with denticles on the outer margin) in the remaining genera of melanocratoid *Platynotina* (*Melanocratus*, *Madobalus*, *Styphacus*, *Doyenus* i *Sebastianus*) resembles that structure in the subtribes *Anomalipina* and *Gonopina*.

The aedeagus is built of penis and tegmen divided into apical and basal part. The apical part has a longitudinal incision at the top, the incision forming a narrow slit. Between the penis and the basal part of the tegmen there is a pair of simple, spade-like parameres (figs 274, 275).

Internal female reproductive apparatus is built of primary bursa copulatrix, joined by a single canal of oviduct (resulting from two earlier fused branches) and a single spermatheca duct with an accessory gland. The spermatheca is formed of multiply dichotomously branched ducts. In *Melanocratus ferreri*, *Sebastianus projectus*, *Styphacus decorsei* and *Styphacus kochi*, I found single larvae in the bursa copulatrix, while in *Melanocratus validipes* and *Styphacus neuter* - single, large eggs (filling the interior of the bursa). This indicates ovoviparity in the species listed above. The phenomenon was noted in 1978 by TSCHINKEL in *Eurynotus capensis* (F.) and *Melanopterus marginicollis* MULS. et REY belonging to African *Oncotini* and *Platynotini*. The ovipositor in melanocratoid *Platynotina* is built like in the remaining *Platynotini* (figs 77, 131). There are indications that the broadened first coxite plate and the reduction of the remaining ones, enlarged plate on which the gonostyle is inserted, as well as weak sclerotisation of the inner walls of coxite plates constitute special adaptations to giving "birth" to the larvae which have developed inside the bursa copulatrix, and whose size exceeds that of an average egg. The detailed structure of the ovipositor and of the larvae found inside the bursa copulatrix will be dealt with in a separate paper.

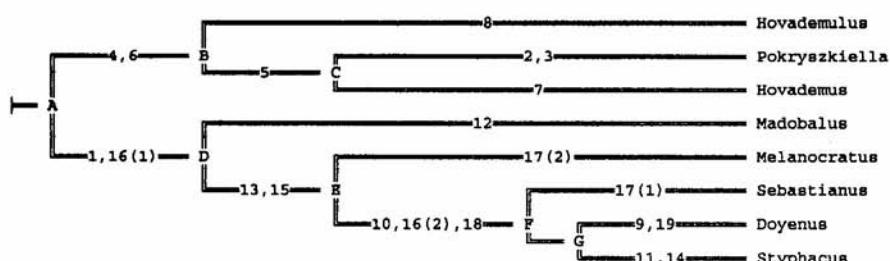
CLADISTIC ANALYSIS

All the 23 specific level taxa were subject to cladistic analysis. Preliminary studies made it possible to select 19 characters, out of 35 studied initially. Most

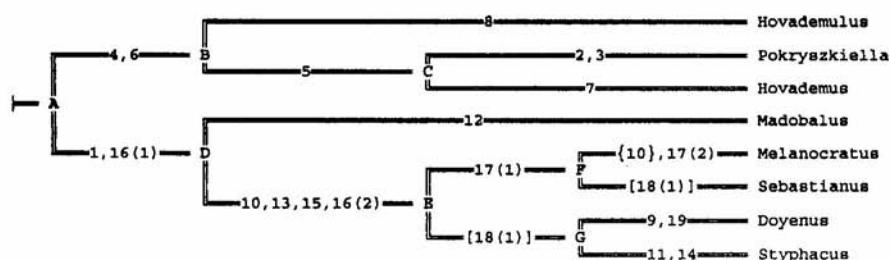
autapomorphic characters of particular species and those characterizing males only were omitted. Exceptions are characters defining monotypic genera *Madobalus* (12) and *Pokryszkiella* (2, 3), as well as character 17, being a synapomorphy of members of the genus *Melanocratus*. Characters 15 i 16 are distinguishable in both sexes, however, they are more distinctly expressed in the sex marked in the character matrix.

Eleven cladograms, 32 steps long, were obtained, $ci = 71$, $ri = 91$. Cladograms 4 and 5 (cladogram I) and 7 (cladogram II) were used for further analysis (fig. 1). The low number of characters used in the analysis (19) compared with the number of taxa (23 species) was the reason for obtaining trees terminating with species groups. In spite of omitting many characters which are homoplasies, still 4 homoplasies are left in the analysis (characters 10, 15, 16 and 18). The high number of such characters results probably from the occurrence of many related species within a comparatively small area (belt of lowlands and uplands in S part of Madagascar). These factors, as well as a wide continuous and mosaic variability of members of the genera *Sebastianus* and *Styphacus* (the two groups probably display an accelerated speciation rate),

Cladogram I.



Cladogram II.



1. Phylogenetic relationships between genera of the melanocratoid *Platynotina*.

Explanations to parentheses: (character state), [parallelism], {reversal}

render attempts at reconstructing species-level phylogeny of melanocratooid *Platynotina* futile. Earlier hypotheses on the relationships between species groups, resulting from examination of apomorphic characters of particular species, have been confirmed by the cladistic analysis. This provides a basis for a formal distinguishing of genera; species groups in the cladograms depicting the phylogeny of melanocratooid *Platynotina* have been replaced with genera.

Cladograms I and II are divided into 2 main branches (A node). One of them comprises 3 genera (*Hovademus*, *Hovademulus*, *Pokryszkiella*), the other includes the remaining 5 (*Madobalus*, *Doyenus*, *Styphacus*, *Melanocratus* and *Sebastianus*). The difference between the two variants consists in the position of the genus *Sebastianus*. In the first variant (cladogram I), it is a member of the same clade as the genera *Doyenus* and *Styphacus* (characters 10, 16 and 18 as synapomorphies), while in the second (cladogram II) it forms a separate clade with the genus *Melanocratus* (character 17 is a synapomorphy of the two genera, but only in relation to an evolutionary trend: gradual transformation of the male mid tibia; in this case character 18 in the cladogram is a parallelism).

Despite the absence of an apomorphy shared by the genera *Doyenus* and *Styphacus*, in cladogram I they form a clade together, which, considering rather strong synapomorphies that characterize particular genera (*Doyenus* - characters 9 and 19, *Styphacus* - 11 and 14, *Sebastianus* - 17) and the problematic position of the genus *Sebastianus*, agrees with the principle of dichotomy.

The species group of *Styphacus neuter* (*S. kochi*, *S. nimius* and *S. bartolozzi*) and *S. decorsei* and *S. phreneticus* were included in one genus, based on 2 synapomorphies (characters 11 and 14, which in my opinion are very unique, distinctly and unequivocally developed in all the species). The decision resulted (both in cladogram I and II) in a necessity to interpret characters 10, 15 and 18 as reversals, and character 16(3) as a parallelism (in *Melanocratus fairmairei* outer margin of the female fore tibia is provided with fine denticles). In cladogram II additionally (in case of the genus *Melanocratus*) characters 10 and 16 are reversals.

In my opinion cladogram I better represents hypothetical phylogeny of melanocratooid *Platynotina*.

List of characters and character states (0-plesiomorphies, 1,2,3-apomorphies).

1. mid part of mentum: flat (0), strongly convex (1).
2. mandible: simple (0), with a process (1).
3. clypeal emargination: narrow (0), wide (1).
4. Genal canthus: wider than eyes (0), equal to or narrower than eyes (1).
5. head or prosternum from the underside: simple (0), with a transverse pit (1).
6. margin of pronotum base: complete or vanishing in middle (0), widely interrupted (1).
7. pronotum sides: rounded or nearly parallel (0), parallel (1), converging towards the base (2).
8. margin of prosternal process: wide (0), narrow (1).

9. prosternal process in the middle: flat (0), with a longitudinal groove (1).
 10. base of elytra: simple (0), with a bordering (1).
 11. anterior margin of elytra: above scutellum (0), below scutellum (1).
 12. scutellum: small (0), large (1).
 13. elytral epipleura: evenly narrowing towards apex (0), widened at the level of 3-4 abdominal ventrite (1).
 14. elytral epipleura: flat (0), with a concavity (1).
 15. male abdominal ventrites: smooth (0), with grooves and tubercles (1).
 16. outer margin of female fore tibia: simple (0), with 1 denticle (1), with 2 denticles (2), with numerous denticles (3).
 17. male mid tibia: slightly widened (0), slightly emarginate inside (1), hammer-like (2).
 18. outer margin of mid tibia: simple (0), with denticles (1).
 19. fore femora: simple (0), strongly widened (1).

CHARACTER MATRIX OF ALL MEMBERS OF MELANOCRATOID PLATYNOTINA

KEY TO THE GENERA

1. Genal canthus equal to or narrower than eyes (fig. 37); bordering of pronotum base widely interrupted in middle (fig. 27); male fore tibia with a deep pit-like concavity on the inner side, on the outer side at most widened terminally 2.
- Genal canthus wider than eyes (fig. 3); bordering of pronotum base complete, sometimes vanishing in middle (fig. 2); male fore tibia inside simple or with a ridge, on the outer side 1 apical denticle and sometimes 1 additional denticle or fine median denticles 4.
2. Concavities between mid part of mentum and lateral wings deep (fig. 75); prosternal process widely bordered (fig. 70); head or the underside or prosternum with a transverse pit (figs 55, 71) 3.
- Concavities between mid part of mentum and lateral wings shallow (fig. 39); prosternal process narrowly bordered (fig. 26); head on the underside or prosternum smooth (simple, with no pit) *Hovademulus*
3. Clypeus widely emarginate anteriorly (fig. 179); mandibles with a process on anterior margin; anterior angles of pronotum produced (fig. 176); sides of pronotum rounded; humeral angles strongly protruding laterally (rys. 180) *Pokryszkiella*
- Clypeus narrowly emarginate anteriorly (fig. 67); anterior margin of mandible simple; anterior angles of pronotum rounded (fig. 72); pronotum sides almost parallel; humeral angles rounded (fig. 66) *Hovademus*
4. Scutellum small (fig. 180); epipleura at the level of 4-5 abdominal ventrite widened (fig. 206); 1 segment of hind tarsi not elongate (fig. 91) 5.
- Scutellum large (fig. 99); epipleura widest at the level of humeri, narrowing towards the apex (fig. 95); 1 segment of hind tarsi elongate (fig. 111) *Madobalus*
5. Anterior margin of elytra protruding beyond anterior margin of scutellum (fig. 120); elytral epipleura narrow (figs 118, 153) 6.
- Anterior margin of elytra at the level of or below anterior margin of scutellum (fig. 261); elytral epipleura with gutters, especially deep in apical part (rys. 260) *Styphacus*
6. Anterior margin of elytra from humerus towards scutellum bordered (fig. 205); on fore tibia apical denticle and additionally a median denticle on the outer margin (fig. 208) 7.
- Anterior margin of elytra simple (fig. 136); fore tibia with apical denticle, fine denticles may occur in the middle of outer margin (figs 169, 170) *Melanocratus*
7. Prosternal process in middle with a longitudinal gutter-like concavity, so that the bordering becomes practically invisible (fig. 5); fore femora strongly widened (fig. 8); male hind femora bent (fig. 9) *Doyenus*
- Prosternal process in middle evenly convex, its border well visible (fig. 204); fore femora not widened (fig. 217); male hind femora straight *Sebastianus*

Doyenus gen. nov.

Type species: *Doyenus uncus* sp. nov.; gender masculine.

NAME DERIVATION

The genus named in honour of Professor John T. DOYEN, who offered his help and good advice at the very beginning of my scientific career.

DIAGNOSIS

Doyenus resembles the genera *Styphacus* and *Sebastianus* (base of elytra bordered, outer margin of mid tibia provided with denticles). It differs in the structure of mesosternal process (longitudinal gutter in the middle present) and fore and hind femora in males (figs 8, 9).

DESCRIPTION

Large species (19.0-27.0 mm), colour dark brown to black. Body distinctly convex, abruptly narrowing terminally at posterior 1/3. Genal canthus wider than eyes. Mid part of mentum rather wide, round; lateral wings medium-sized. Pronotum elongate ($pl/pb = 0.69-0.78$); its sides rounded; anterior angles produced anterad; base arcuate, nearly straight; bordering of anterior margin and base complete, in middle irregular; along sides rather wide (especially in males), longitudinal concavities, separating disc from lateral bordering. Prosternal process strongly protruding towards mesosternum; with a longitudinal gutter-like concavity, so that the bordering becomes practically invisible. Anterior margin of elytra partly bordered, slightly convex, protruding above scutellum; elytral rows well visible; intervals distinctly convex; epipleura flat, at the level of 4-5 abdominal ventrites widened. Fore femora in both sexes strongly widened; male hind femora bent. Outer margin of fore tibiae provided with a blunt apical denticle and a fairly wide median denticle. Outer margin of mid tibiae denticulate. General structure of aedeagus and female copulatory apparatus like in the remaining melanocratooid *Platynotina*.

DISTRIBUTION

S Madagascar.

KEY TO SPECIES

1. Mid part of mentum evenly convex; humeral angles of elytra rounded; male hind tibia with 2 denticles at base; male abdominal ventrites I and II with tubercles *uncus*
- Mid part of mentum with a longitudinal keel; humeral angles of elytra straight; male hind tibia with one denticle and a blunt convexity at base; male abdominal ventrite I slightly convex in middle, ventrite II flat *dentatus*

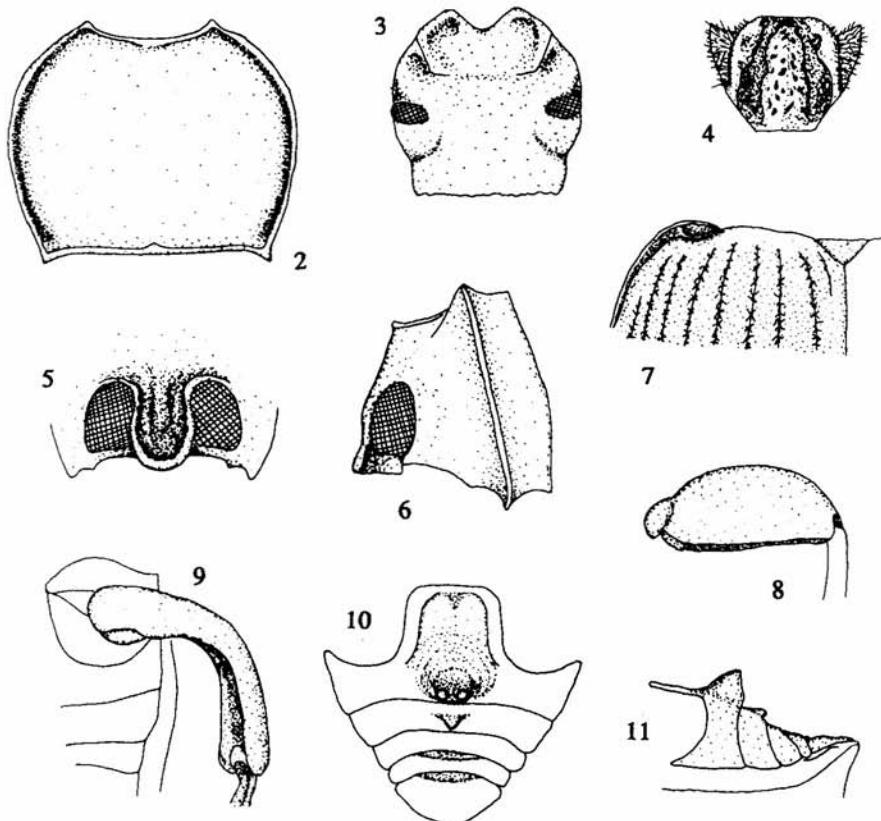
Doyenus uncus sp. nov.

Name derivation: *uncus* - Latin hook-like, bent.

Locus typicus: Androka (Madagascar).

DIAGNOSIS

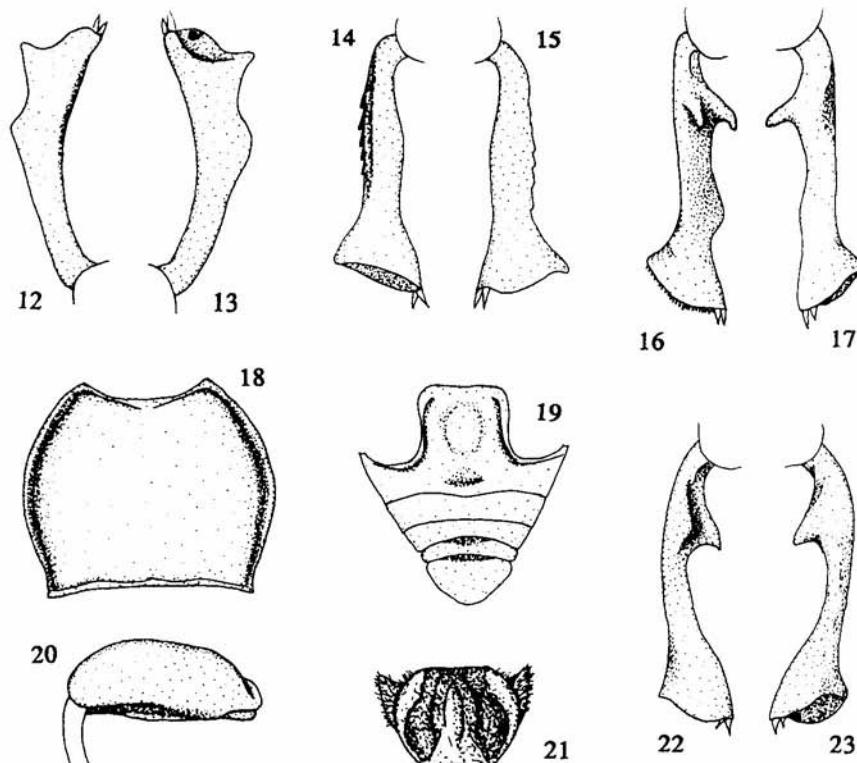
Doyenus uncus is a member of the genus *Doyenus* with *D. dentatus* as the only congener. The two species share a characteristic, elongate body shape, structure of prosternal process (figs 5, 6) and of fore and hind femora. *D. uncus* differs from *dentatus* in the even convexity of the mid part of mentum (in *dentatus* with a keel in middle), rounded humeral angle of elytra (straight in *dentatus*), 2 denticles at the base of male hind tibia (1 denticle in *dentatus*), tubercles on abdominal ventrites I and II (absent in *dentatus*).



2-11. *Doyenus uncus*: 2 - pronotum, 3 - head, 4 - mentum, 5 - prosternum, 6 - pronotum in lateral view, 7 - anterior part of elytron, 8 - male profemur, 9 - male metafemur, 10 - male abdomen, 11 - male abdomen in lateral view

DESCRIPTION

Body length 24.0-27.0 mm, pl/pb = 0.72-0.77, el/eb = 1.34-1.38, el/pl = 1.89-2.08, eb/pb = 1.08-1.09. Upper and underside of body shiny and smooth, only on head a delicate, well visible puncturation. Antennae short (pl/al c. 1.62), relatively thick (ab/al c. 0.08). Mid part of mentum evenly, rather strongly convex (fig. 4). Head elongate, sides of frons and genae at frontal suture with concavities (fig. 3). Anterior angles of pronotum strongly produced anterad, posterior angles almost straight (fig. 2). Humeral angles of elytra rounded. Sides of elytra rounded, widest at the level of hind coxae, strongly narrowing towards the apex. Scutellum medium-sized, bordering of anterior margin of elytra reaches from humeral angles to the base of V elytral row (fig. 7). Elytral rows deep, punctures in rows invisible, junctions in the posterior part of elytra variable; intervals moderately convex, very delicately punctate. Male abdominal ventrites I and II with tubercles (figs 10, 11). Tibiae and fore femur as in figs 8, 12-17. Apical part of aedeagus fairly long, l.b.p./l.a.p. c. 2.97.



12-17. *Doyenus uncus*: 12-13 - male protibia: 12 - dorsal, 13 - ventral, 14-15 - male mesotibia: 14 - dorsal, 15 - ventral, 16-17 - male metatibia: 16 - dorsal, 17 - ventral. 18-23 - *D. dentatus*: 18 - pronotum, 19 - male abdomen, 20 - male profemur, 21 - mentum, 22-23 - male metatibia: 22 - dorsal, 23 - ventral

DISTRIBUTION (fig. 92)

S Madagascar.

TYPES

Holotype (male); MNHN; "Muséum Paris, Madagascar, Prov. de Tulear, Androka, Lieut. GAUDRON 1913".

Paratype: Muséum Paris, Madagascar, Prov. de Tulear, G. PETIT 1926, (MNHN) 1 m.

Doyenus dentatus sp. nov.

Name derivation: *dentatus* - Latin: denticulate, provided with teeth.

Locus typicus: Ambovombe (Madagascar).

DIAGNOSIS

see diagnose of *D. uncus*.

DESCRIPTION

Body length 19.0-23.0 mm, pl/pb = 0.69-0.78, el/eb = 1.43-1.49, el/pl = 1.99-2.28, eb/pb = 1.03-1.10. Body upper and underside shiny and smooth, head distinctly punctate, pronotum with a delicate, poorly visible puncturation. Antennae relatively short (pl/al c. 1.34), rather thick (ab/al c. 0.07). Mid part of mentum with a longitudinal keel (fig. 21). Head elongate, on sides of frons and genae, at frontal suture, concavities. Anterior angles of pronotum straight, posterior angles produced laterally (fig. 18). Humeral angles of elytra straight, strongly produced anterad. Sides of elytra rounded, widest at the level of hind coxae, strongly narrowing towards apex. Scutellum medium-sized, bordering of anterior margin of elytra reaching from humeral angles to the base of V elytral row. Elytral rows deep, punctures in rows invisible, junctions in the posterior part of elytra variable; intervals well convex, very delicately punctate, wrinkled. Male abdominal ventrite I slightly convex in middle, ventrite II flat (fig. 19). On male hind tibia a denticle and a blunt convexity at base (figs 22, 23), fore femur as in fig. 20. Apical part of aedeagus moderately long, l.b.p./l.a.p. c. 2.40.

DISTRIBUTION (fig. 92)

S Madagascar.

TYPES

Holotype (male); MNHN; "Institut Scientifique Madagascar; Madagascar-Sud., Beloha 175 m., Ambovombe, 20.II.58, P. GRIVEAUD".

Paratypes: Juin; Muséum Paris Madagascar S. District de Tsihombé, Beloha Lieut. DECARY 1919" (MNHN) 1 f; Muséum Paris; Inst. Scient. Madagascar, Beloha 5.8.48, A.R., (MNHN) 1 f.

***Hovademulus* gen. nov.**

Type species: *Selinus punctipennis* FAIRMAIRE, 1902; gender masculine.

DIAGNOSIS

The genus is closely related to *Hovademus* and *Pokryszkiella* (genal canthus equal to or narrower than eyes; bordering of the base of pronotum widely interrupted in middle; on the inner side of male fore tibia a deep pit-like concavity). It differs in the structure of mentum (fig. 25) and in the narrow bordering of prosternal process.

DESCRIPTION

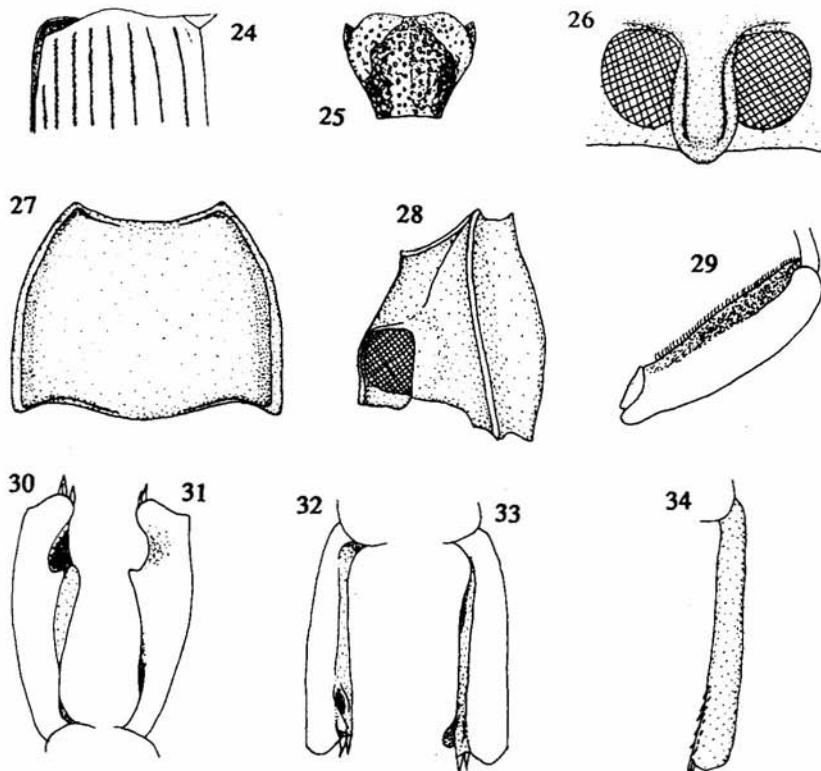
Small species (10.0-13.5 mm), colour dark brown to black. Genal canthus equal to or narrower than eyes. Mid part of mentum flat, with deep, narrow gutters at sides. Sides of pronotum parallel or nearly so, anterior angles distinctly produced anterad, bordering of anterior margin and base widely interrupted in middle. Base of pronotum doubly, sinuately emarginate. Prosternal process evenly convex, strongly protruding towards mesosternum, with a narrow bordering. Elytral humeri not protruding outwards. Anterior margin of elytra not bordered, convex anterad. Elytral epipleura flat, widest at the level of humeri, then evenly narrowing towards apex. Male fore and mid tarsi widened. Male fore tibiae widened, on their inner side a rather deep, longitudinal concavity, outer apical angle blunt, outer margin simple. Aedeagus basic structure as in other melanocratoid *Platynotina*.

REMARKS

The genus includes 3 species, of which *Hovademulus punctipennis* (FAIRM.) was redescribed, and the other 2 described based on single specimens. I have decided to do that since I had males at my disposal; all the species have very distinct diagnostic characters which justify my taxonomic decisions. It is a rather interesting group in that it has some characters that place it close to members of the New World genus *Opatrinus* (head structure, widely interrupted bordering of pronotum base, elytral punctuation in *H. punctipennis*). At the same time, very significant characters (deep emargination of clypeus, structure of elytral epipleura and distribution) indicate a close relationship with other Madagascan endemics of the melanocratoid *Platynotina* group. Species of the genus *Hovademulus* enrich the phylogenetic lineage formed together with the genera *Hovademus* and *Pokryszkiella* (till now only 2 species of *Hovademus* were known), which differs distinctly from the remaining Madagascan endemics of the group of melanocratoid *Platynotina*. They are poorly known (apart from the original description of 1902, *Selinus punctatipennis* FAIRM. was mentioned only in GEBIEN's catalogue), and the beetles are of a size departing from that of other Madagascan species, and thus difficult to identify and sort out of museum collections. The group is probably more speciose and this paper may make it possible to study it in more detail.

KEY TO SPECIES

1. Prosternal process completely bordered (fig. 38); elytral intervals flat; elytral rows shallow, punctures large, well visible (fig. 40) 2.
- Bordering of prosternal process interrupted at apex (fig. 26); elytral intervals strongly convex; elytral rows deep, punctures small, barely visible (fig. 24) *ordinarius*
2. Lateral margins of pronotum widely bordered and provided with a longitudinal groove (fig. 35); male fore tibiae on the inner side with a short apical concavity, not reaching middle of tibiae (fig. 44) *punctipennis*
- Lateral margins of pronotum narrowly bordered, with no groove (fig. 47); male fore tibiae on the inner side with a longitudinal concavity reaching from apex to nearly the base (fig. 48) *tenuiculus*



24-34. *Hovademulus ordinarius*: 24 - anterior part of elytron, 25 - mentum, 26 - prosternum, 27 - pronotum, 28 - pronotum in lateral view, 29 - male profemur, 30-31 - male protibia: 30 - dorsal, 31 - ventral, 32-33 - male mesofemur: 32 - dorsal, 33 - ventral, 34 - male metatibia

Hovademulus ordinarius sp. nov.

Name derivation: *ordinarius* - Latin regular, common.

Terra typica: Plateau de l'Androy (Madagascar).

DIAGNOSIS

H. ordinarius, like *punctipennis* and *tenuiculus*, has deep grooves on the sides of the mid part of mentum, and a narrowly bordered prosternal process. The species differs from the remaining ones in the structure of elytra and in the apically interrupted bordering of the prosternal process.

DESCRIPTION

Body length 13.5 mm, pl/pb = 0.73, el/eb = 1.42, el/pl = 2.20, eb/pb = 1.13. Colour black, upperside with a greasy sheen, underside shiny. Surface of head, pronotum and elytra smooth, puncturation invisible; underside of body delicately but distinctly punctate, on abdominal ventrites 1-3 delicate longitudinal wrinkles. Antennae fairly long (pl/al c. 1.04), moderately thick (ab/al c. 0.07). Mentum heart-shaped (fig. 25); lateral wings very small; anterior margin slightly emarginate; middle slightly convex. Pronotum as in fig. 27; anterior angles strongly produced anterad, posterior angles sharp; bordering of sides wide, along the sides longitudinal concavities separating disc from lateral margins; base strongly, doubly, sinuately emarginate. Elytral humeral angles distinct, nearly straight (fig. 24). Anterior margin of elytra relatively strongly convex anterad. Elytral rows very deep, punctures in rows invisible; in the posterior part of elytra rows connected in the following way: 1-9, 2-7, 3-6, 4-5, 8 free. Elytral intervals strongly, regularly convex. Bordering of prosternal process interrupted at apex (figs 26, 28). Mesosternum narrow, with a deep gutter in middle. Shiny, bare gutters on the underside of tarsi in males on 4 ft, 4 mt, 2-3 ht. Male fore tibiae on the inside with a deep incision at apex (figs 30, 31), on mid tibiae 2 blunt denticles close to apex (figs 32, 33), hind tibia as in fig. 34. Inner margin of male fore femur thickly and shortly pilose (fig. 29). Processes of apical part of aedeagus slightly bent, l.b.p./l.a.p. c. 2.48.

DISTRIBUTION (fig. 92)

S Madagascar.

TYPE

Holotype (male); MNHN; "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Plateau de l'Androy, Rég. d'Ambovombe".

Hovademulus punctipennis (FAIRMAIRE, 1902) comb. nov.

Selinus punctipennis FAIRMAIRE, 1902: 329; GEBIEN 1910: 278; 1938: 298.

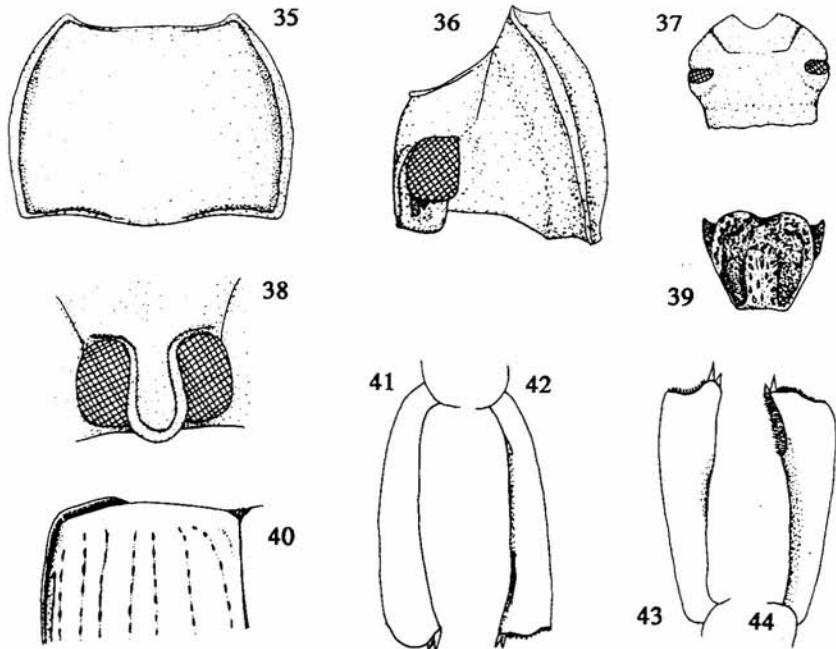
Locus typicus: Ankarahitra (Madagascar).

DIAGNOSIS

H. punctipennis resembles *tenuiculus* in the structure of elytra. It differs in the structure of pronotum, scutellum and male fore tibiae and hind femora.

DESCRIPTION

Body length 11.0 mm, pl/pb = 0.70, el/eb = 1.24, el/pl = 1.91, eb/pb = 1.11. Colour dark brown, upperside with a greasy sheen, underside shiny. Surface of head distinctly punctate, pronotum and elytra delicately punctate, puncturation barely visible; middle of prosternum coarsely punctate, mesosternum surface granulate, on abdominal ventrites 1-3 longitudinal delicate wrinkles. Head as in fig. 37. Antennae fairly long (pl/al c. 1.08), moderately thick (ab/al c. 0.06). Mid part of mentum rather wide; lateral wings small; anterior margin slightly emarginate; middle slightly convex (fig. 39). Pronotum as in fig. 35; anterior angles produced anterad, posterior angles straight; bordering of sides wide, along sides longitudinal concavities separating disc from lateral margins; pronotum base slightly doubly sinuately emarginate.



35-44. *Hovademulus punctipennis*: 35 - pronotum, 36 - pronotum in lateral view, 37 - head, 38 - prosternum, 39 - mentum, 40 - anterior part of elytron, 41-42 - male mesotibia: 41 - dorsal, 42 - ventral, 43-44 - male protibia: 43 - ventral, 44 - dorsal

Elytral humeral angles distinct, nearly straight; scutellum very small; anterior margin of elytra almost straight, poorly convex anterad (fig. 40). Elytral rows very shallow, punctures in rows elongate, barely visible; in the posterior part of elytra rows connected in the following way: 1 free, 2-9, 3-6, 4-5, 7-8. Elytral intervals poorly convex. Prosternal process completely bordered (figs 36, 38). Mesosternum with a wide, shallow gutter in middle. Shiny, bare gutters on the underside of tarsi in males on 4 mt, 1-3 ht. Male fore tibia on the inside with a short, shallow concavity on apex (figs 43, 44), mid tibia simple (figs 41, 42). Processes of apical part of aedeagus slightly bent, l.b.p./l.a.p. c. 2.40.

TYPE

Selinus punctipennis FAIRMAIRE, 1902 - holotype (male); MNHN; "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Ankarahitra, PERRIER; *Selinus punctipennis* F.M. Madag.; Type" (examined).

Hovademulus tenuiculus sp. nov.

Name derivation: *tenuiculus* - Latin: rather slight, meagre.

Locus typicus: Bekily (Madagascar).

DIAGNOSIS

See diagnose of *H. punctipennis*.

DESCRIPTION

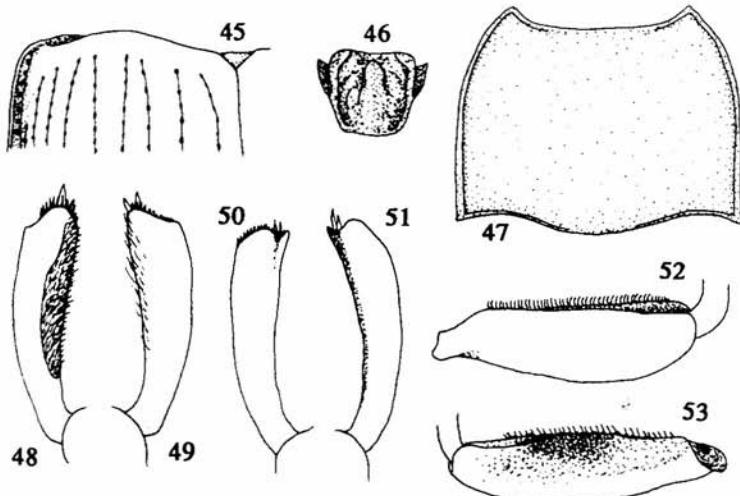
Body length 10.0 mm, pl/pb = 0.74, el/eb = 1.51, el/pl = 2.03, eb/pb = 1.13. Colour dark brown, upperside with a greasy sheen, underside slightly shiny. Head surface distinctly punctate, pronotum and elytra delicately punctate; puncturation barely visible; middle of prosternum coarsely punctate, mesosternum surface granulate, abdominal ventrites delicately but distinctly punctate. Mid part of mentum rather strongly widened anterad; lateral wings small; anterior margin almost straight; middle slightly convex (fig. 46). Pronotum as in fig. 47; anterior angles strongly produced anterad, posterior angles almost straight; bordering of pronotum sides wide; pronotum base doubly sinuately emarginate. Elytral humeral angles distinct, rounded; scutellum small; anterior margin of elytra slightly convex anterad (fig. 45). Elytral rows shallow, punctures in rows rounded; in the posterior part of elytra rows connected in the following way: 1-9, 2-7, 3-4, 5-6, 8 free. Elytral intervals poorly convex. Prosternal process completely bordered. Mesosternum slightly convex in middle. Inner margin of male fore femur thickly, shortly pilose (figs 52, 53); on hind femur hairs sparse and long. Male fore tibia on the inside with a long, shallow concavity (figs 48, 49), on mid tibia a small apical tooth (figs 50, 51). Processes of apical part of aedeagus slightly bent, l.b.p./l.a.p. c. 2.79.

DISTRIBUTION (fig. 92)

S Madagascar.

TYPE

Holotype (male); MNHN; "Muséum Paris, I. 1933, A. SEYRIG; Madagascar, Bekily, sud de l'Ile".



45-53. *Hovademulus tenuiculus*: 45 - anterior part of elytron, 46 - mentum, 47 - pronotum, 48-49 - male protibia: 48 dorsal, 49 - ventral, 50-51 - male mesotibia: 50 - ventral, 51 - dorsal, 52-53 - male profemur: 52 - ventral, 53 - dorsal

***Hovademus* ARDOIN, 1970**

Hovademus ARDOIN, 1970: 165.

Type species: *Hovademus andringitrensis* ARDOIN, 1970 (present designation).

DIAGNOSIS

The genus is closely related to *Pokryszkiella* and *Hovademulus* (see diagnosis); it differs in the structure of pronotum.

DESCRIPTION

Small species (10.0-13.5 mm), colour black. Mid part of mentum flat, with wide and shallow concavities on sides, lateral wings very small. Genal canthus equal to or narrower than eyes (fig. 67). Pronotum sides parallel; anterior angles not produced, rounded; bordering of anterior margin and base of pronotum widely interrupted in

middle; base of pronotum doubly, sinuately emarginate; posterior angles sharp; pronotal disc evenly convex, with no gutter along lateral margins. Prosternal process widely bordered, strongly protruding towards mesosternum. Elytral humeri not protruding outwards. Anterior margin of elytra not bordered, slightly convex anterad. Elytral rows very shallow, delicately marked, punctures in rows fine, elongate, practically invisible; in the posterior part of elytra rows connected in the following way: 1 free, 2-9, 3-6, 4-5, 7-8 (fig. 52). Elytral epipleura flat, widest at the level of humeri, then evenly narrowing towards apex. Shiny, bare gutters on the underside of tarsi in males on 3 ht, in females on 3-4 ft, 3-4 mt, 2-3 ht. Male fore tibiae slightly bent inwards, widest in middle, inside rather deep concavity, outer apical angle straight, outer margin of fore tibia simple. Male mid tibiae slightly widened, on the inside 2 apical denticles situated on the opposite margin of the concavity. Aedeagus and female copulatory apparatus basic structure as in other melanocratoid *Platynotina*.

KEY TO SPECIES.

1. Anterior margin of mentum straight (fig. 75); mid part of prosternal process evenly convex (fig. 70); pronotum sides parallel at base (fig. 72); elytral humeral angles strongly produced anterad (fig. 69); on the inner side of male hind femur a denticle and a strongly pilose concavity (fig. 85); male hind tibia bare (fig. 82) *pauliani*
- Anterior margin of mentum emarginate (fig. 64); in mid part of prosternal process a longitudinal concavity (fig. 55); pronotum sides at base somewhat widened (fig. 65); elytral humeral angles rounded (fig. 66); male hind femur simple; male hind tibia thickly pilose on the inner side (fig. 61) *andringitrensis*

Hovademus andringitrensis ARDOIN, 1970

Hovademus andringitrensis ARDOIN, 1970: 166.

Terra typica: Andringitra Centre (Madagascar).

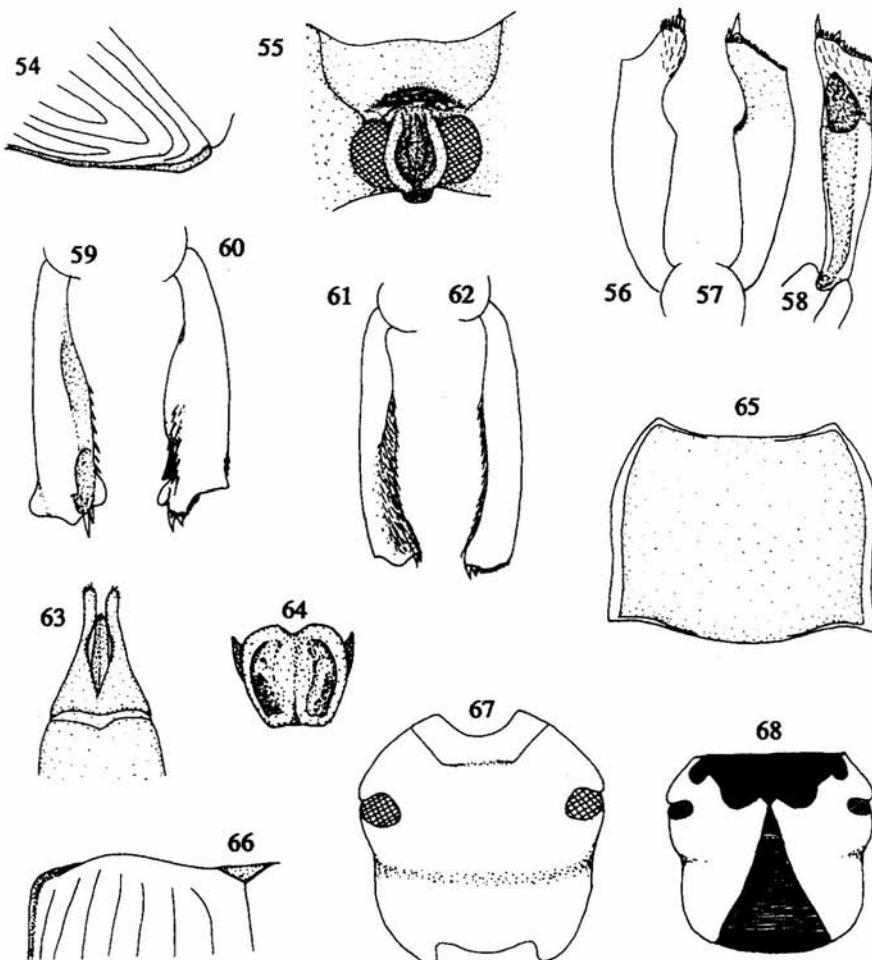
DIAGNOSIS

H. andringitrensis and *H. pauliani* are the only known members of the genus *Hovademus* (see generic diagnose and description). *H. andringitrensis* differs from *H. pauliani* in the structure of mentum, prosternal process, shape of pronotum sides and elytral humeral angles. The differences between these species include also the structure of male hind femur and hind tibia as well as aedeagus.

DESCRIPTION

Body length 10.5-12.0 mm, pl/pb = 0.65-0.78, el/eb = 1.25-1.30, el/pl = 2.03-2.11, eb/pb = 1.26-1.27. Colour black with a greasy sheen, surface of head, pronotum, elytra and prosternum smooth, puncturation invisible; mesosternum, metasternum

and abdominal ventrites distinctly punctate, on abdominal ventrites 1-3 delicate longitudinal wrinkles. Antennae moderately long (pl/al c. 1.12), moderately thick (ab/al c. 0.07). Anterior margin of mentum slightly emarginate (fig. 64). Underside of head anterior to stridulatory gula evenly convex. Sides of pronotum slightly emarginate anterior to posterior angles. Prosternal process in its mid part with a deep, double concavity; at base of prosternal process a transverse pit-like concavity (fig. 55). In middle of mesosternum a shallow gutter. Elytral humeral angles rounded



54-68. *Hovademus andringitrensis*: 54 - apex of elytron, 55 - prosternum, 56-58 - male protibia: 56 - dorsal, 57 - ventral, 58 - mesoventral, 59-60 - male mesotibia: 59 - dorsal, 60 - ventral, 61-62 - male metatibia: 61 - dorsal, 62 - ventral, 63 - aedeagus, 64 - mentum, 65 - pronotum, 66 - anterior part of elytron, 67-68 - head: 67 - dorsal, 68 - ventral

(fig. 66). Fore tibiae as in figs 56-58, male hind tibia on the inner side thickly pilose (figs 61, 62). Processes of apical part of aedeagus slightly bent outwards (fig. 63), l.b.p.l.a.p. c. 2.19. Structure of female copulatory apparatus as in *H. pauliani*.

DISTRIBUTION (fig. 92)

SE Madagascar

MATERIAL EXAMINED

Muséum Paris Coll. P. ARDOIN 1978, *Hovademus andringitrensis*, P. ARDOIN Det. 1976, Muséum Paris Madagascar Centre mission C.N.R.S. R.C.P. no 225, V R, Andringitra Centre zone sommitale, fal. Ivangromena, 2100 - 2500 m. 9-XI/10-XII-1970, (MNHN) 1 m, 1 f.

Hovademus pauliani ARDOIN, 1970

Hovademus pauliani ARDOIN, 1970: 166; 1976: 5.

Locus typicus: Andohahelo (Madagascar).

DIAGNOSIS

see diagnose of *H. andringitrensis*.

DESCRIPTION

Body length 10.0-13.5 mm, pl/pb = 0.73-0.79, el/ebs = 1.28-1.32, el/pl = 1.97-2.11, eb/pb = 1.18-1.21. Colour, sheen and puncturation similar to those in *H. andringitrensis*. Antennae (fig. 74) moderately long (pl/al c. 1.14), moderately thick (ab/al c. 0.07). Anterior margin of mentum straight (fig. 75). On the underside of head, anterior to stridulatory gula transverse, rather deep pit occupying c. 1/2 head width (fig. 71). Pronotum as in fig. 72. Mid part of prosternal process evenly convex (fig. 70). In middle of mesosternum a shallow, narrow gutter. Elytral humeral angles straight, strongly convex anterad (fig. 69). Tarsi as in figs 86-91. Male tibiae as in figs 80-84. On the inner side of male hind femur a denticle and a strongly pilose concavity, hind tibia bare (fig. 82). Processes of apical part of aedeagus almost straight (fig. 76), l.b.p.l.a.p. c. 2.00. Structure of female copulatory apparatus as in figs 77-79, primary bursa copulatrix simple, spermatheca in the form of a long, single duct.

DISTRIBUTION (fig. 92)

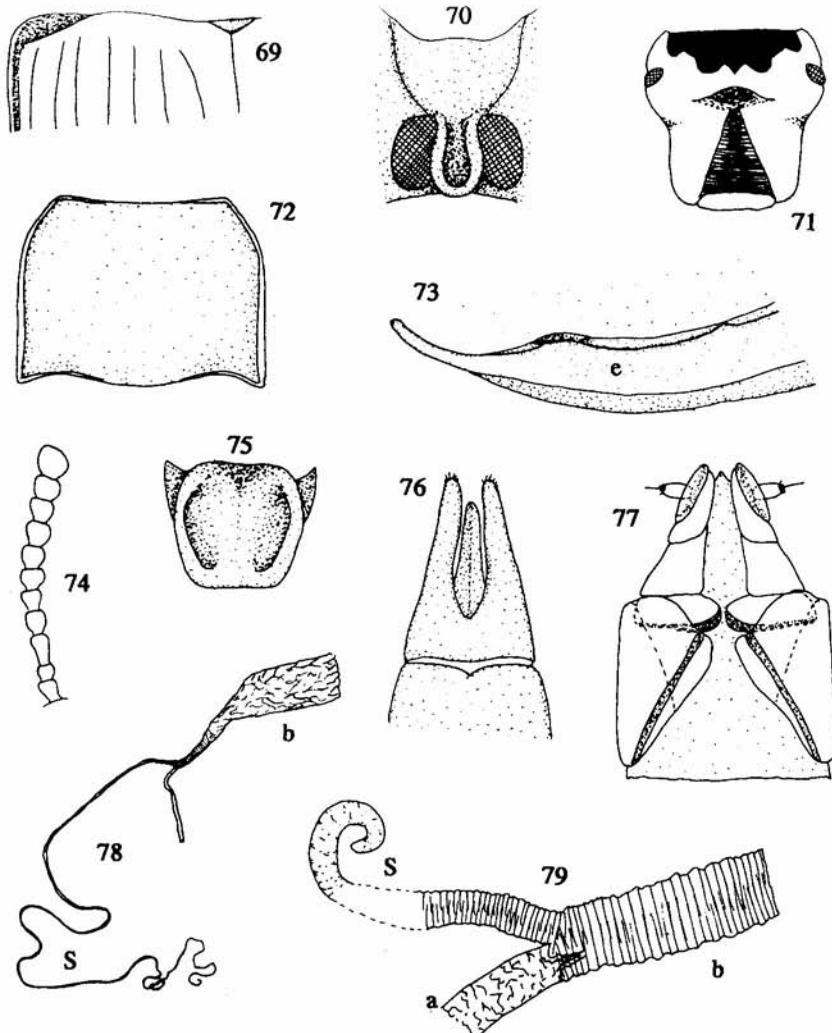
SE Madagascar

MATERIAL EXAMINED

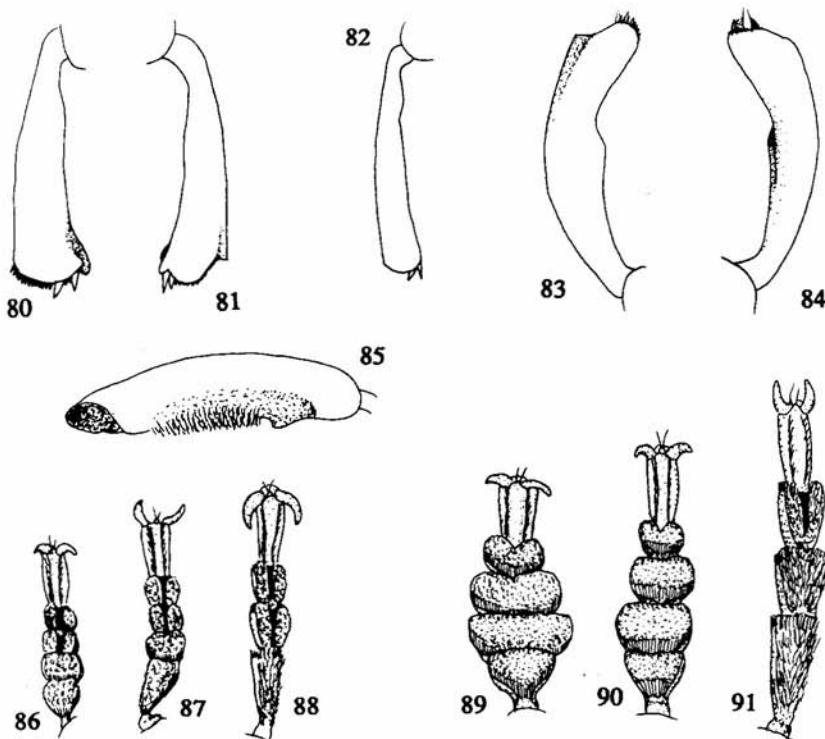
Muséum Paris, Madagascar Est., mission C.N.R.S. R.C.P. n 225; Chafnes anoyennes S.O. du Trafonaomby plateau Andohahelo 1770 - 1950 m. V - 1972, (MNHN) 10 m, 4 f (probably also paratypes, but not indicated).

TYPES

Hovademuus pauliani ARDOIN, 1974 - paratypes: Paratype *Hovademuus pauliani* n. sp. P. ARDOIN, Chafnes anosyennes, S.O. du Trafonaomby plateau Andohahelo 1770 - 1950 m. V - 1972, (TMB), 1 m; Muséum Paris, Coll. P. ARDOIN 1978, Paratype *Hovademuus pauliani* n.sp. P. ARDOIN, 2845, Institut Scientifique Madagascar, Andohahelo (2800 m.) 4-54. (R.P.), (MNHN) 1 m (examined).



69-79. *Hovademuus pauliani*: 69 - apex of elytron, 70 - prosternum, 71 - head, ventral, 72 - pronotum, 73 - ventral part of elytral apex (e = epipleuron), 74 - antenna, 75 - mentum, 76 - aedeagus, 77 - ovipositor, 78 - bursa copulatrix (b) and spermatheca (s), 79 - the connection of spermatheca (s), bursa copulatrix (b) and accessory gland (a)



80-91. *Hovademus pauliani*: 80-81 - male mesotibia: 80 - dorsal, 81 - ventral, 82 - male metatibia, 83-84 - male protibia: 83 - dorsal, 84 - ventral, 85 - male metafemur, 86-88 - female tarsi: 86 - pro-, 87 - meso-, 88 - meta-, 89-91 - male tarsi: 89 - pro-, 90 - meso-, 91 - meta-

Madobalus FAIRMAIRE, 1901

Madobalus FAIRMAIRE, 1901: 73.

Type species identified by monotypy: *Madobalus rotundicollis* FAIRMAIRE, 1901.

DIAGNOSIS

The genus *Madobalus* is related to *Melanocratus*, *Sebastianus*, *Doyenus* and *Styphacus* (mid part of mentum strongly, keel-like, convex, genal canthus wider than eyes, bordering of pronotal base complete or vanishing only in middle, outer margin of fore tibia provided with 1 or more denticles). It differs in considerably more elongate tarsal segments, antennae longer than pronotum (in the remaining genera shorter), relatively large scutellum, and aedeagus structure (cf. l.b.p./l.a.p.).

DESCRIPTION

For details see description of *Madobalus rotundicollis*.

***Madobalus rotundicollis* FAIRMAIRE, 1901**

Madobalus rotundicollis FAIRMAIRE, 1901: 73; GEBIEN 1910: 307; 1938: 291.

Terra typica: as inferred from the title of publication: Plateau de l'Androy (Madagascar).



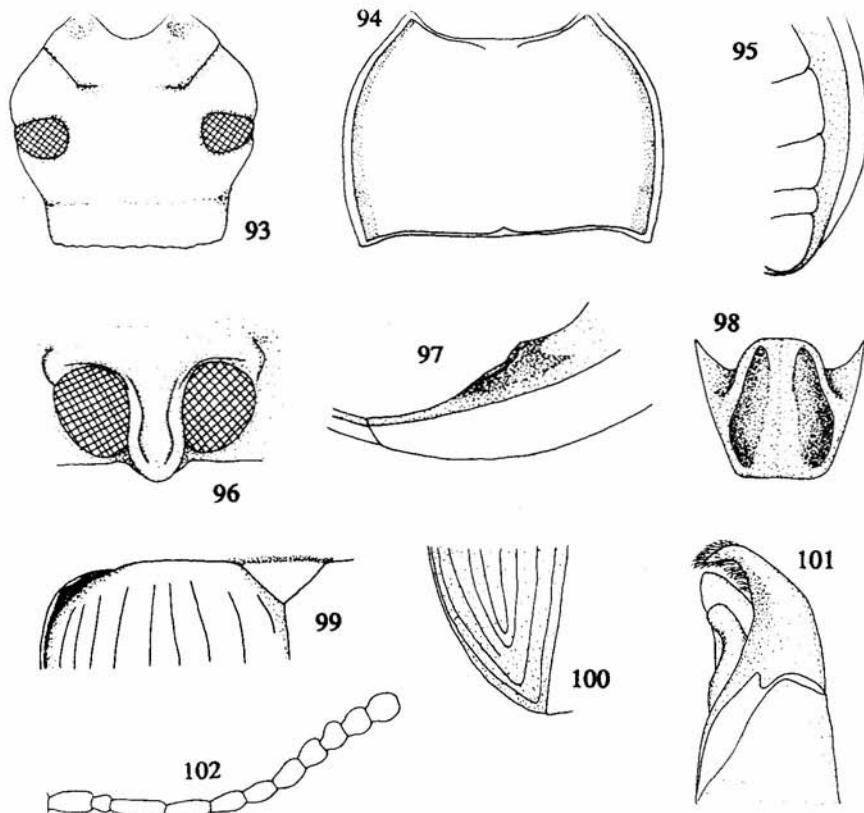
92. Distribution of *Doyenus unicus* (white circle), *D. dentatus* (black circle), *Hovademulus ordinarius* (white square), *H. tenuiculus* (black square), *Hovademulus andringitrensis* (white triangle) and *H. pauliani* (black triangle)

DIAGNOSIS

See diagnose of the genus *Madobalus*.

DESCRIPTION

Body length 15.0-19.0 mm, $pl/pb = 0.59-0.63$, $el/eb = 1.40-1.49$, $el/pl = 2.44-2.67$, $eb/pb = 1.06-1.16$. Upperside black, mat, with a greasy sheen; head surface delicately punctate; pronotum and elytra smooth, puncturation invisible; underside dark brown, shiny, impunctate, on abdominal ventrites delicate longitudinal wrinkles. Antennae long (fig. 102), longer than pronotum ($pl/al c. 0.87$), moderately thick ($ab/al c. 0.07$). Mid part of mentum oval, lateral wings well developed (fig. 98). Sides of pronotum rounded; anterior angles strongly produced anterad; base arcuate, almost straight; bordering anteriorly narrowly interrupted; bordering of pronotal base complete, in the very middle irregular; along sides gentle longitudinal concavities separating disc from lateral margins (fig. 94). Prosternal process strongly protruding towards mesosternum, its bordering blurred at the very tip (fig. 96). In the

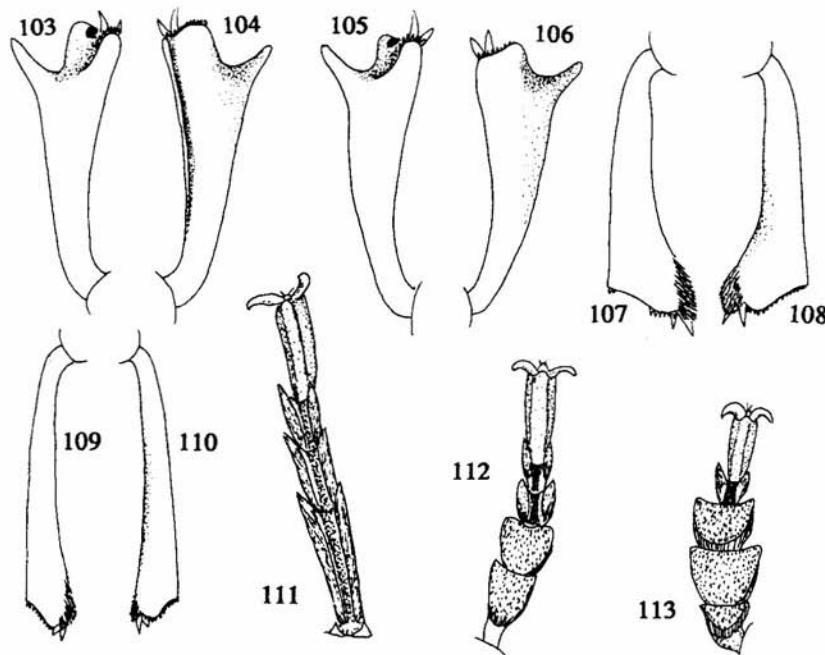


93-102. *Madobalus rotundicollis*: 93 - head, 94 - pronotum, 95 - elytral epipleuron, 96 - prosternum, 97 - apex of elytral epipleuron, 98 - mentum, 99 - anterior part of elytron, 100 - apex of elytron, 101 - aedeagus, lateral, 102 - antenna

middle of mesosternum a shallow gutter. Elytral humeral angles rounded, with a slightly protruding keel-like margin; anterior margin of elytra only slightly convex, almost straight; scutellum comparatively large (fig. 99). Elytral rows shallow, no punctures in rows; in the posterior part of elytra rows connected in the following way: 1-9, 2-8, 3-6, 4-5, 7 free (fig. 100); intervals poorly convex. Elytral epipleura flat, widest at the level of humeri, then regularly narrowing towards apex (figs 95, 97). Male tarsi as in figs 111-113; shiny, bare gutters on the underside of tarsi in males on 4 ft, 4 mt, 1-3 ht, in females on 1-4 ft, 1-4 mt, 1-3 ht. On fore tibiae in both sexes (figs 103-106) a large, sharp preapical denticle on the outer margin, in male inner margin provided with a thin ridge; male mid and hind tibia widened terminally, thickly pilose (fig 107-110). Processes of apical part of aedeagus strongly bent (fig. 101), apical part rather long, l.b.p./l.a.p. c. 3.04. Structure of female copulatory apparatus as in the remaining melanocratoid *Platynotina*.

DISTRIBUTION (fig. 196)

S Madagascar.



103-113. *Madobalus rotundicollis*: 103-104 - male protibia: 103 - dorsal, 104 - ventral, 105-106 - female protibia: 105 - dorsal, 106 - ventral, 107-108 - male mesotibia, 107 - ventral, 108 - dorsal, 109-110 - male metatibia: 109 - ventral, 110 - dorsal, 111-113 - male tarsi: 111 - meta-, 112 - meso-, 113 - pro-

MATERIAL EXAMINED

Muséum Paris, Madagascar S., District de Tsihombé, Beloha, Lieut. Decary 1919; Mai, (MNHN) 1 m; Muséum Paris, Coll. P. ARDOIN 1978; Inst. Scient. Madagascar, Beloha, 5.8.48.(A.R), (MNHN) 1 m; *Madobalus rotundicollis* det. ENDRODY-YOUNGA; Madagascar I.1956 C. KOCH leg.; Faux Cap, Ambovombe Distr., (TM) 1 m, 2 f, (TMB) 1 f; Marovato, Ambovombe Distr.; Madagascar I.1956 C. KOCH leg., (TM) 2 m, 1 f, (TMB) 2 m.

TYPES

Madobalus rotundicollis FAIRMAIRE, 1901 - lectotype (male) and paralectotype (female); MNHN; "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Type; *Madobalus rotundicollis*, Madagascar; Plateau de l'Androy-Rég. d'Ambovombe", paralectotypes: Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Muséum Paris, Madagascar, Androy, Manambovo, Dr. J. DECORSE 1901; 15 au 30 Janv.01; *Madobalus rotundicollis*, (MNHN) 1 m; *Madobalus rotundicollis*, Cotype; Plateau de l'Androy-Rég. d'Ambovombe, (MGFT) 1 m, (present designation).

***Melanocratus* FAIRAMAIRE, 1895**

Melanocratus FAIRAMAIRE, 1895: 21.

Type species identified by monotypy: *Melanocratus validipes* FAIRMAIRE, 1895.

DIAGNOSIS

Melanocratus is similar to the genera *Sebastianus*, *Doyenus* and *Styphacus* (elytral epipleura widened below apex, on abdominal ventrites grooves or tubercles). It differs in the structure of male mid tibiae (hammer-like, outer margin simple), and absence of bordering of the anterior margin of elytra.

DESCRIPTION

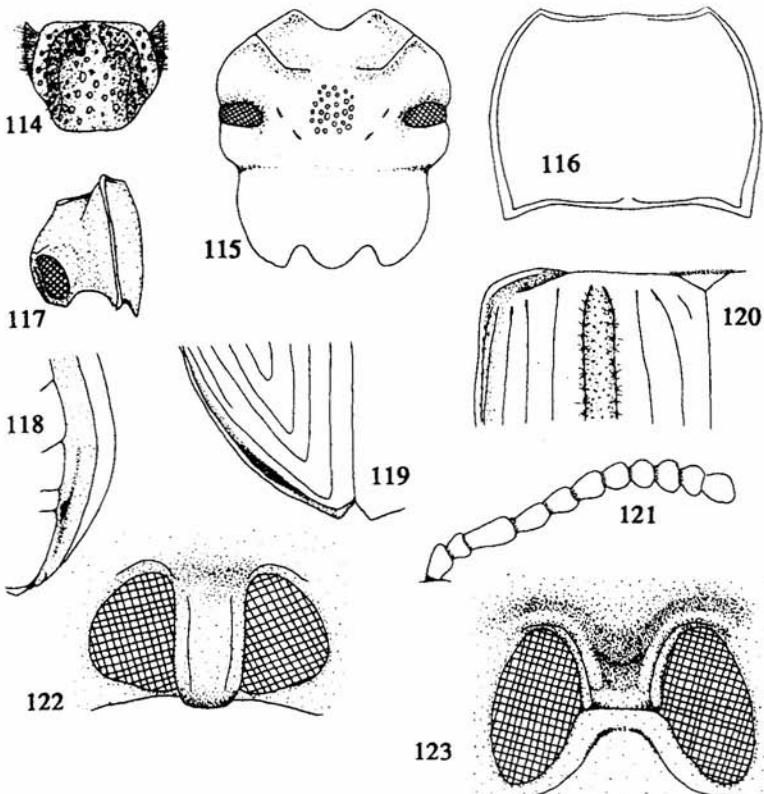
Medium-sized beetles (13.5-20.5 mm), whole body shiny, only pronotum mat with a greasy sheen, legs and antennae dark brown. Genal canthus wider than eyes. Bordering of pronotal base complete, in middle irregular. Anterior margin of elytra convex above scutellum, with no bordering. Scutellum small, epipleura widened at the level of 4-5 abdominal ventrite, flat. Prosternal process widely bordered, bordering interrupted at apex, middle evenly convex. On male abdominal ventrite I a protuberance in middle, on other ventrites longitudinal wrinkles. On fore tibia apical denticle, in female tibia widened, with fine denticles in the middle of outer margin (*M. fairmairei*). Male mid tibia hammer-like, outer margin simple. General structure of aedeagus and female copulatory apparatus as in the remaining melanocraetoid *Platynotina*.

DISTRIBUTION

S and SE Madagascar.

KEY TO SPECIES

1. Elytral apices contacting; male hind femora simple 2.
- Elytra diverge just before apex (fig. 119); male hind femora with a concavity on the inner side (fig. 133) *validipes*
2. Body more slender ($pl/pb = 0.68-0.72$, $el/cb = 1.49-1.54$); male pronotum trapezoidal, widest anteriorly and narrowing towards base (fig. 157); pronotal sides delicately bordered; middle of prosternum longitudinally keel-like convex (fig. 138) *ferreri*
- Body not so slender ($pl/pb = 0.59-0.64$, $el/cb = 1.28-1.33$); male pronotum sides rounded (fig. 158); bordering very distinct, with a deep longitudinal gutter; prosternum evenly convex *fairmairei*



114-123. *Melanocratus validipes*: 114 - mentum, 115 - head, 116 - pronotum, 117 - pronotum in lateral view, 118 - elytral epipleuron, 119 - apex of elytron, 120 - anterior part of elytron, 121 - antenna, 122 - prosternum, 123 - mesosternum

***Melanocratus validipes* FAIRMAIRE, 1895**

Melanocratus validipes FAIRMAIRE, 1895: 22; GEBIEN 1910: 307; 1938: 411; ARDOIN 1969: 462.
Styphacus humerosus FAIRMAIRE, 1901: 72; GEBIEN 1910: 308; 1938: 411, **syn. nov.**

Terra typica: Pays Mahafaly (Madagascar).

DIAGNOSIS

M. validipes, like *M. ferreri* and *M. fairmairei*, has hammer-like male mid tibiae. The shape of mentum, elytral puncturation and the structure of fore tibiae place it close to *ferreri*, while the shape of pronotum and the structure of prosternal process - to *fairmairei*. The species differs from the remaining members of the genus *Melanocratus* in the structure of elytral apex, mesosternum and male hind femora.

DESCRIPTION

Body length 17.0-20.5 mm, pl/pb = 0.65-0.73, el/eb = 1.41-1.45, el/pl = 2.10-2.32, eb/pb = 1.04-1.07. Body upperside black, slightly shiny; underside lighter, dark brown, shiny, distinctly punctate. Head strongly, distinctly punctate (fig. 115). Antennae (fig. 121) relatively short (pl/al c. 1.24), moderately thick (ab/al c. 0.07). Mid part of mentum wide anteriorly, in middle evenly convex, lateral wings well developed (fig. 114). Pronotum sides rounded; anterior angles rounded, poorly produced anterad; base feebly, doubly sinuately emarginate, nearly straight; bordering of pronotum sides shallow but distinct, somewhat widened before posterior angles (fig. 116). Puncturation of pronotum and elytra delicate, barely visible. Middle of prosternum evenly convex (fig. 117); prosternal process truncate (fig. 122). Mesosternum convex in middle (fig. 123). Elytral humeral angles almost straight, with a distinctly protruding keel-like margin (fig. 120). Elytral rows shallow, punctures well developed; in the posterior part of elytra rows connected in the following way: 1-9, 2-7, 3-6, 4-5, 8 free; intervals moderately convex, delicately punctate. At apex elytra divergent (fig. 119). Male abdominal ventrites as in fig. 132. Shiny, bare gutters on the underside of tarsi in males on 4 ft (fig. 135), 1-4 mt, 1-3 ht, in females on 1-4 ft, 1-4 mt, 1-3 ht. On fore tibia in both sexes a large apical denticle on the outer margin (fig 124-126), in male inner margin provided with a thin ridge; male mid and hind tibia as in figs 127-130. On the inner side of male hind femur a concavity and a denticle (fig. 133). Apical part of aedeagus relatively short, l.b.p./l.a.p. c. 2.15. Structure of female copulatory apparatus as in figs 131, 134.

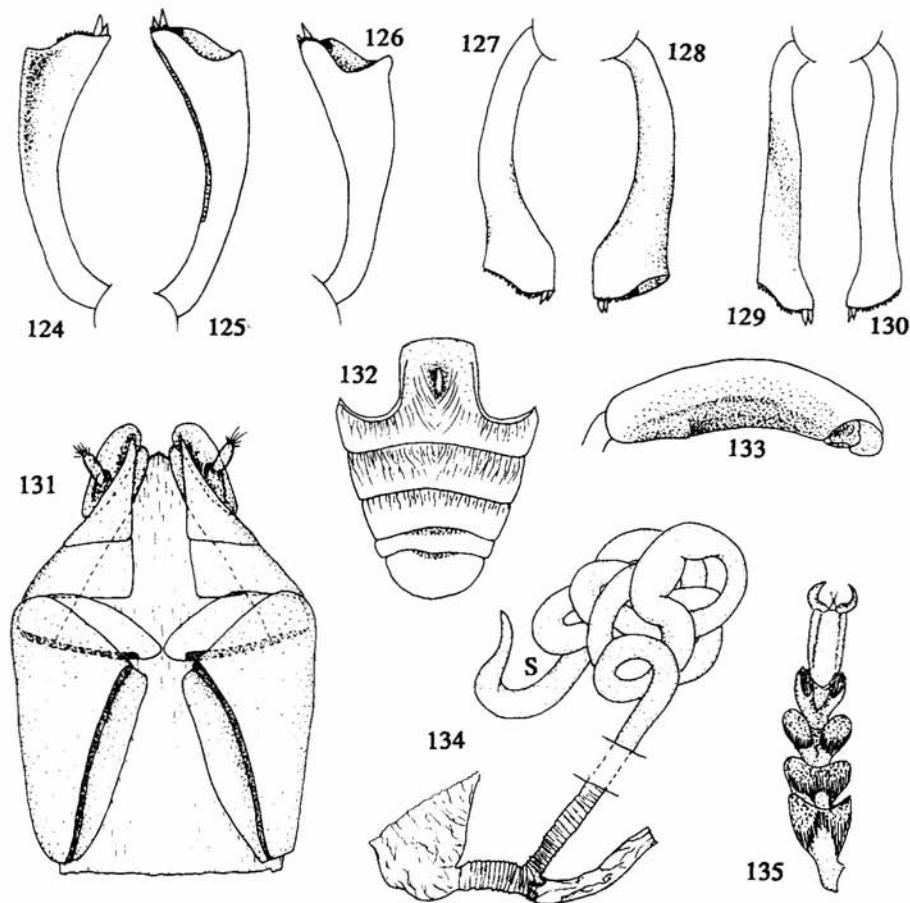
DISTRIBUTION (fig. 175)

S and SE Madagascar.

MATERIAL EXAMINED

Muséum Paris, 1906 Coll. Léon FAIRMAIRE; *Melanocratus validipes* FAIRM. cpr typ.; Mahafaly (Janson), (MNHN) 1 f; Genus *Styphacus*; Muséum Paris 1930 Coll.

Sicard; Madagascar collection LE MOULT; Février, (MNHN) 1 m; Muséum Paris; Madagascar collection LE MOULT; Novembre, (MNHN) 1 m; Muséum Paris; Madagascar Sud, S.E. de Tranomaro, Androatsabo, 400 m. Peyrieras, XII-1971, (MNHN) 3 m, 3 f, Muséum Paris; III.67. Amboasary, pr s Ambovombé, Madagascar Sud, VADON & PEYRIERAS, (MNHN) 1 m: Muséum Paris; Inst. Scient. Madagascar, Androy, Tranomaro 15.8.48. R.P.; (MNHN) 1 m; Muséum Paris, Madagascar S.E., Prov. de Farafangana, Midongy du S. 600 A. 1000 m., R. DECARY 1926, (MNHN) 2 m, 5 f; dec. 1900 & janv. 01; Muséum Paris, Madagascar, Androy, sept Imanombo, Cap



124-125. *Melanocratus validipes*: 124-125 - male protibia: 124 - ventral side, 125 - dorsal, 126 - female protibia, 127 - 128 - male mesotibia: 127 - dorsal, 128 - ventral, 129-130 - male metatibia: 129 - dorsal, 130 - ventral, 131 - ovipositor, 132 - male abdomen, 133 - male metafemur, 134 - spermatheca (s), 135 - male protarsus

Vacher 1901, (MNHN) 3 m; 6 au 10 Juin 00; Muséum Paris, Madagascar Androy sept Imanombo, Dr. J. Decorse 1901, (MNHN) 1 m, 1 f; 15 au 31 mars 01; Muséum Paris, Madagascar, Région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, (MNHN) 1 f, *humerosus* FAIRM. det. Kaszab; 380; Sammlung H. GEBIEN; Midongy Madag. mer. or., (TMB) 1 f; Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Madagascar Sud, Andrahomana, ALLUAUD 1900, (MNHN) 2 f; Muséum Paris; Madagascar Sud, plateau Mahafaly, 11/12 km. Ouest d'Ankalirano 250 m. 1/6-II-1974 P. VIETTE et A. PEYRIERAS, (MNHN) 1 f; Muséum Paris, Coll. Ch. ALLUAUD; *Styphacus quadricollis* FAIRM. cpré type; GEBIEN det.; *humerosus* FAIRM. det. KASZAB Madagascar Sud, Pays Androy Nord, Alluaud 1900 26, (MNHN) 4 m, 6 f; *Styphacus quadricollis* FAIRM.; Muséum Paris Coll. Ch. ALLUAUD; Madagascar Sud Andrahomana, ALLUAUD 1900, (MNHN) 2 f; Madagascar I.1956 C. KOCH leg.; Antanimora, Ambovombe Distr., (TM) 3 m, 1 f; I.S. Madagascar, 25-8-47, (TM) 1 f; S.o. Ctr. Madagascar, LJUNGQVIST, (TM) 2 f, 16 km. N.E. of Androka, (TM) 1 f.

TYPES

Melanocratus validipes FAIRMAIRE, 1895 - holotype (male); MNHN; "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; decrit dans Ann. Soc. ent Belg. 1895, p 22.; Holotype; Madagascar Sud, Pays Mahafaly S.T. Last. 1893; *Melanocratus validipes* FAIRM. - ng. nsp. Madag." (examined).

Styphacus humerosus FAIRMAIRE, 1901 - holotype (male); MNHN; "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Plateau de l'Androy - Reg. d'Ambovombe; Type; *Styphacus humerosus* FAIRM., Madag." (examined).

Melanocratus ferreri sp. nov.

Name derivation: in honour of Julio FERRER.

Locus typicus: Androka (Madagascar).

DIAGNOSIS

M. ferreri resembles *M. fairmairei* due to the structure of elytral apex (incision absent), mesosternum (wide, shallow gutter in middle) and male hind femur (simple). *M. ferreri* differs from *M. fairmairei* in the shape and bordering of pronotum, elytral puncturation and keel-like convexity of prosternum (evenly convex in *fairmairei*).

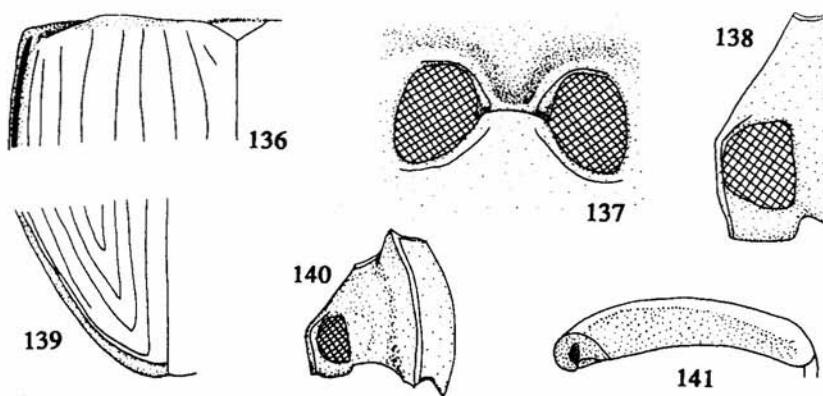
DESCRIPTION

Body length 14.5-18.0 mm, pl/pb = 0.68-0.72, el/eb = 1.49-1.54, el/pl = 2.12-2.37, in females eb/pb = 1.08-1.14, in males eb/pb = 0.95-0.97. Upperside of body black, strongly shiny; underside dark brown, shiny, distinctly punctate. Head strongly, distinctly punctate (fig. 155). Antennae (fig. 149) relatively short (pl/al c. 1.30), moderately thick (ab/al c. 0.07). Mid part of mentum wide anteriorly, in middle

evenly convex, lateral wings well developed (fig. 154). Female pronotum narrower than elytra, its sides rounded; male pronotum heart-shaped, wider than elytra (fig. 157); anterior angles strongly rounded, poorly produced anterad; base poorly, doubly sinuately emarginate, nearly straight; bordering of sides wide, before posterior angles slightly widened. Pronotum delicately punctate, puncturation barely visible. Prosternum in middle keel-like, longitudinally convex (fig. 138); prosternal process protruding towards metasternum (fig. 140). Mesosternum in middle with a wide, shallow gutter (fig. 137). Elytral humeral angles straight (fig. 136). Elytral rows shallow, punctures poorly visible; in the posterior part of elytral rows connected in the following way: 1-9, 2-7, 3-6, 4-5, 8 free (fig. 139); intervals poorly convex, very delicately punctate. Male abdominal ventrites as in fig. 152. Male fore tarsi slightly widened (fig. 150), in female narrow (fig. 151); shiny, bare gutters on the underside of tarsi in males and females on 1-4 ft, 1-4 mt, 1-3 ht. Male fore tibiae relatively thin (figs 142, 143), in female strongly widened (fig. 144). Male mid and hind tibiae as in figs 145-148. Male hind femur on the inner side evenly convex (fig. 141). Apical part of aedeagus relatively short, l.b.p./l.a.p. c. 2.28.

DISTRIBUTION (fig. 175)

S Madagascar.

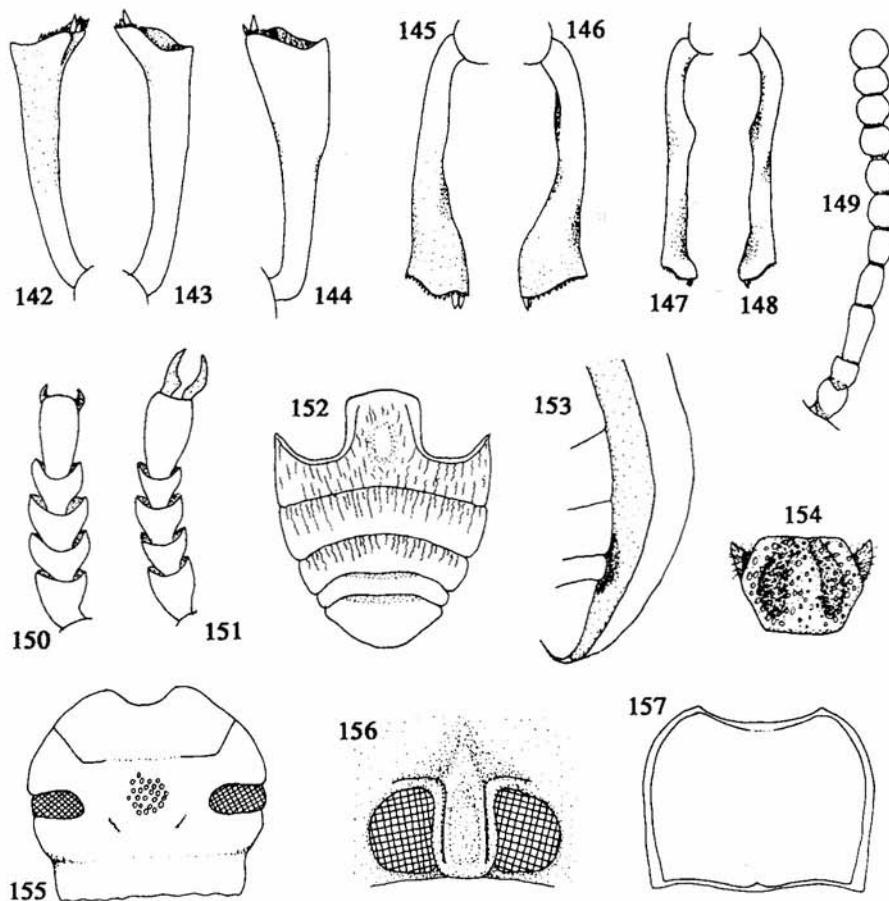


136-141. *Melanocratus ferrei*: 136 - anterior part of elytron, 137 - mesosternum, 138 - prosternum in lateral view, 139 - apex of elytron, 140 - pronotum in lateral view, 141 - male metafemur

TYPES

Holotype (male); TM; "Madagascar I. 1956 C. Koch leg.; Androka, Ampanihy Distr.".

Paratypes: I.1956 C. KOCH leg.; Ambovombe, s. Madagascar, (TMB) 1 f, 15 au 30 nov. 00; Muséum Paris, Madagascar, Région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, (MNHN) 1 f; 1 au 15 sept. 00; Muséum Paris, Madagascar, Région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, (MNHN) 1 m, 1 f; Muséum Paris, Madagascar, A. Grandidier 1867 (MNHN) 1 f; Muséum Paris, Madagascar, Prov. de Tulear, Androka, Lieut. GAUDRON 1913, (MNHN) 1 m; Plateau de l'Androy - Reg.



142-157. *Melanocratus ferreri*: 142-143 - male protibia: 142: ventral, 143 - dorsal, 144 - female protibia, dorsal, 145-146 - male mesotibia: 145 - dorsal, 146 - ventral, 147-148 - male metatibia: 147 - ventral, 148 - dorsal, 149 - antenna, 150-151 - protarsus: 150 - male, 151 - female, 152 - male abdomen, 153 - elytral epipleuron, 154 - mentum, 155 - head, 156 - prosternum, 157 - pronotum

d'Ambovombe; Muséum Paris 1906 Coll. Léon FAIRMAIRE, (MNHN) 1 m; Muséum Paris 1906 Coll. Léon FAIRMAIRE; 15 au 31 mars 01; Muséum Paris, Madagascar, Région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, (MNHN) 1 m; Madagascar, I. 1956 C. KOCH leg.; Marovato, Ambovombe Distr., (TM) 7 m, 2 f, (TMB) 2 m; Muséum Paris, Coll. Ch. ALLUAUD; Madagascar Sud, Pays Androy Sud, ALLUAUD 1900 43, (MNHN) 1 m; Madagascar, I. 1956 C. KOCH leg.; Cap Ste. Marie, Ambovombe Dist., (TM) 1 f, Inst. Scient. Madagascar, Beloha, 5.8.48, A.R, (MNHN) 1 m, (TM) 5 f, 16 km. NE of Androka, (TM) 1 f; Ambovombe, Tsihombe, (TM) 1 m; Lac Tsimanampetsotsa, V-51 R.P.; Institut Scientifique Madagascar, (TM) 2 f, Madagascar, I. 1956 C. KOCH leg.; SW. of Itrobiky, Ampanihy Distr., (TM) 1 m, 1 f; Muséum Paris, Madagascar S., District de Tsihombé, Beloha, Lieut. DECARY 1919; Avril, (MNHN) 1 m, 2 f; Madagascar I. 1956 C. KOCH leg.; Ambovombe, S. Madagascar (TM) 2 m; Madagascar I. 1956 C. KOCH leg.; Androka, Ampanihy Distr. (TM) 1 m; Amboasary Sud, Berenty, Madagascar, I. 1981, A. PEYRIERAS (JFC) 2 m, 1 f.

Melanocratus fairmairei sp. nov.

Name derivation: in honour of an outstanding French entomologist Léon FAIRMAIRE.

Locus typicus: Itampolo (Madagascar).

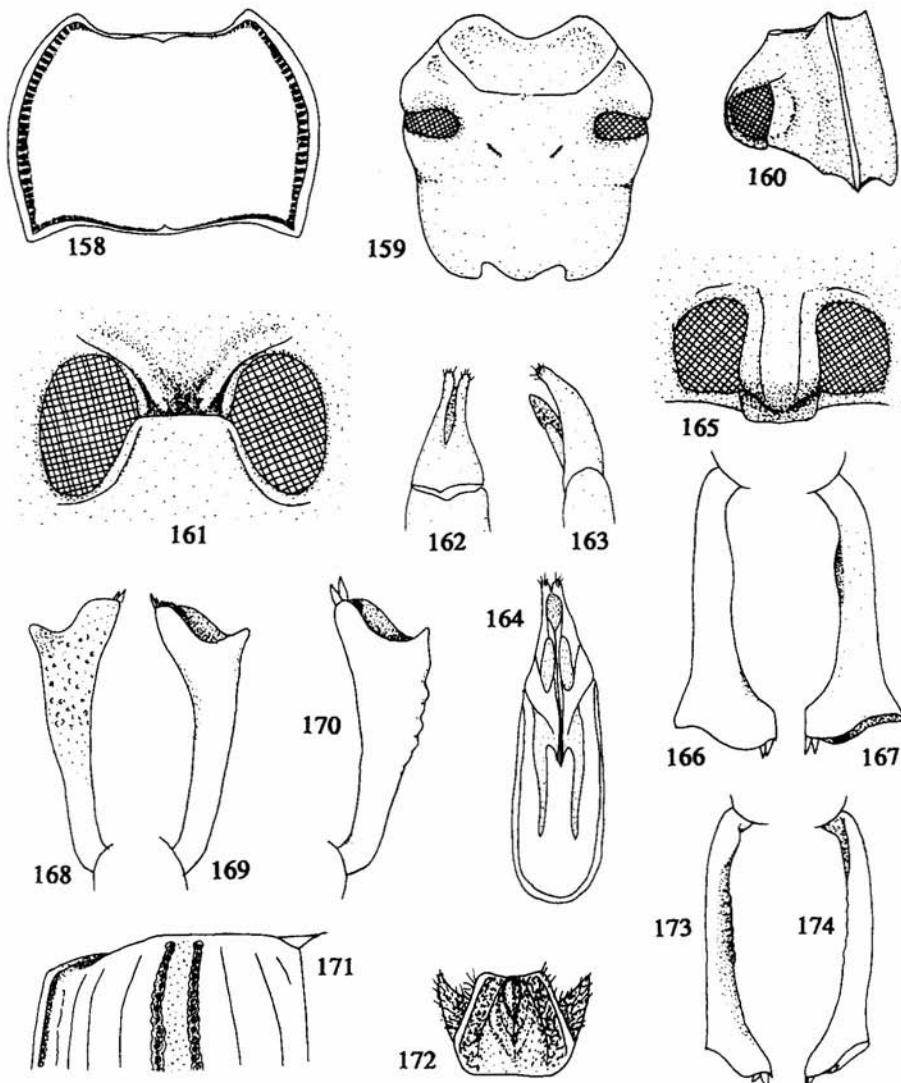
DIAGNOSIS

See diagnoses of *validipes* and *fairmairei*.

DESCRIPTION

Body length 13.5-17.5 mm, pl/pb = 0.59-0.64, el/ebs = 1.28-1.33, el/pl = 2.29-2.32, eb/pb = 1.04-1.08. Upperside of body black, strongly shiny; pronotum mat, with a greasy sheen; underside dark brown, strongly shiny, distinctly punctate. Head as in fig. 159, puncturation indistinct, blurred. Antennae moderately long (pl/al c. 1.12), moderately thick (ab/al c. 0.07). Mid part of mentum strongly narrowing anterad, in middle strongly, keel-like convex; lateral wings relatively strongly developed (fig. 172). Pronotum sides strongly rounded; anterior angles blunt, distinctly produced anterad; base doubly sinuately emarginate; bordering of pronotal sides wide, with a longitudinal, punctate gutter (fig. 158). Pronotum puncturation delicate, practically invisible. Prosternum evenly convex; prosternal process truncate (fig. 160). In middle of mesosternum a moderately wide, distinct gutter (fig. 161). Elytral humeral angles straight; elytral rows very well developed, punctures large, well visible; in the posterior part of elytra rows connected in the following way: 1-9, 2-7, 3-6, 4-5, 8 free; intervals well convex, delicately punctate (fig. 171). Structure of tarsi as in *ferreri*. Fore tibiae of both sexes as in figs 168-170, male mid and hind tibiae as in figs 166, 167, 173, 174. Male hind femur on the inner side evenly convex. Aedeagus as in figs 162-164, apical part relatively short, l.b.p./l.a.p. c. 2.15.

DISTRIBUTION (fig.)
S and SE Madagascar.



158-174. *Melanocratus fairmairei*: 158 - pronotum, 159 - head, 160 - pronotum in lateral view, 161 - mesosternum, 162-164 - aedeagus: 162 - apex, ventral, 163 - lateral, 164 - ventral view, 165 - prosternum, 166-167 - male mesotibia: 166 - ventral, 167 - dorsal, 168-169 - male protibia: 168 - ventral, 169 - dorsal, 170 - female protibia, dorsal, 171 - anterior part of elytron, 172 - mentum, 173-174 - male metatibia, 173 - dorsal, 174 - ventral

TYPES

Holotype (male); TM; "Madagascar I.1956 C. KOCH leg.; Itampolo, Ampanihy Distr."

Paratypes: Muséum Paris, Madagascar, Prov De Tulear G. PETIT 1926, (MNHN) 1 m, 3 f; Institut Scientifique Madagascar; Lac Tsimanampetsotsa V-51 R.P., (MNHN) 1 m, (TM) 2 m, 1 f; Muséum Paris Coll. P. ARDOIN 1978; *Melanocratus validipes* FAIRM. P. ARDOIN det. 1966; 19.V.1965 Itampolo, (bush) S-W. Madagascar, L. BIGOT Leg., (MNHN) 1 m; *validipes* FAIRM. det KASZAB; Madagascar I.1956 C. KOCH leg.; Itampolo, Ampanihy Distr., (TMB) 1 f; Muséum Paris, Madagascar, Ikongo,



175. Distribution of *Melanocratus validipes* (black circles), *M. ferreri* (white circles) and *M. fairmairei* (white and black circles)

G. GRANDIDIER 1902, (MNHN) 1 f; *Melanocratus validipes* FAIRM. det. ENDRÓDY - YOUNGA; Madagascar I.1956 C. KOCH leg.; Itampolo, Ampanihy Distr., (TM) 4 m, 5 f; Institut Scientifique Madagascar; Tongobory Sept-Lacs A.R., (TM) 2 f.

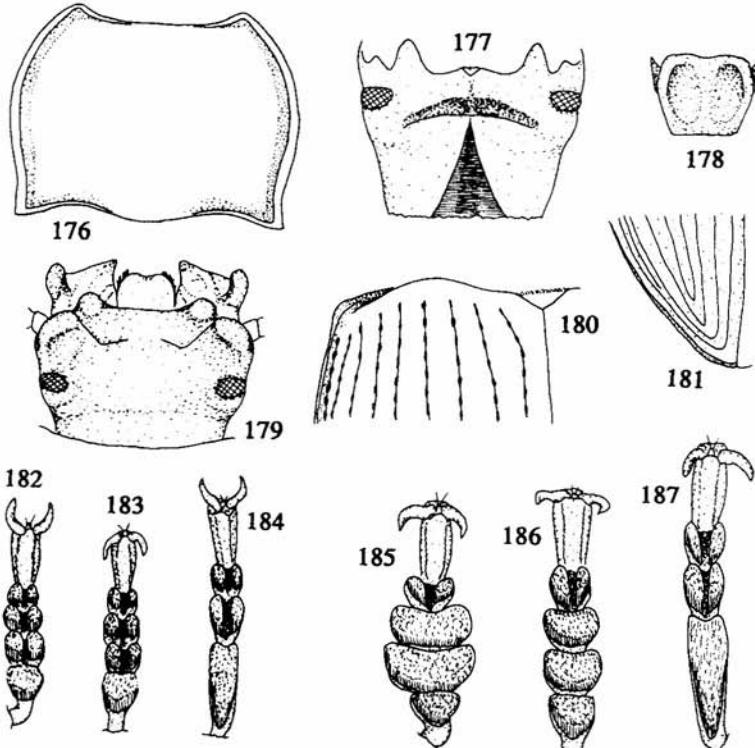
***Pokryszkiella* gen. nov.**

Name derivation: in honour of Dr Beata M. POKRYSZKO, my friend and a critical translator and referee of my recent papers.

Type species: *Pokryszkiella cornuta* sp. nov.; gender feminine.

DIAGNOSIS

The genus is closely related to *Hovademus* (structure of mentum and prosternal process as well as the presence of a transverse pit on the underside of head), and to *Hovademulus* (see diagnosis); it differs in the widely emarginate clypeus (narrowly emarginate in *Hovademus* and *Hovademulus*), presence of a horn on the anterior



176-187. *Pokryszkiella cornuta*: 176 - pronotum, 177 - head, ventral, 178 - mentum, 179 - head, dorsal, 180 - anterior part of elytron, 181 - apex of elytron, 182-187 - tarsus: 182, 185 - pro-, 182 - female, 185 - male, 183, 186 - meso-, 183 - female, 186 - male, 184, 187 - meta-, 184 - female, 187 - male

margin of mandible (absent in *Hovademus* and *Hovademulus*), distinctly rounded pronotum sides (parallel or nearly so in *Hovademus* and *Hovademulus*) and strongly protruding outwards elytral humeral angle (not protruding in *Hovademus* and *Hovademulus*).

DESCRIPTION

A detailed description is contained in the description of *P. cornuta*.

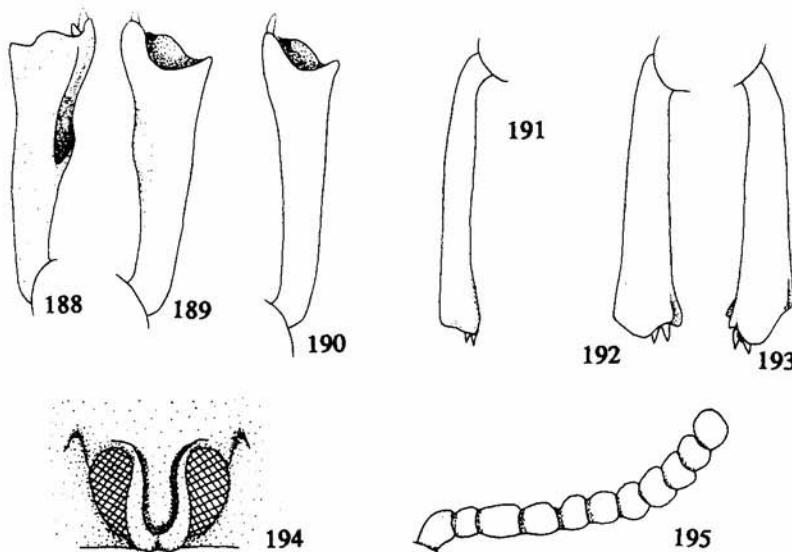
Pokryszkiella cornuta sp. nov.

Name derivation: *cornutus* - Latin: horned.

Terra typica: Andohahelo [National Park] (Madagascar).

DIAGNOSIS

See diagnosis of the genus *Pokryszkiella*.



188-195. *Pokryszkiella cornuta*: 188-189 - male protibia: 188 - ventral, 189 - dorsal, 190 - female protibia, dorsal, 191 - male metatibia, 192-193 - male mesotibia: 192 - dorsal, 193 - ventral, 194 - prosternum, 195 - antenna

DESCRIPTION

Body length 17-21 mm, pl/pb = 0.67-0.70, el/eb = 1.36-1.42, el/pl = 2.11-2.46, eb/pb = 1.07-1.15 (fig. 348). Colour black, mat, surface of head, pronotum, elytra and prosternum smooth, puncturation invisible; meso- and metasternum punctate, on abdominal ventrites delicate longitudinal wrinkles. Anterior margin of clypeus widely emarginate (fig. 179), lateral angles of clypeal emargination and processes on the outer margin of mandibles produced anterad (more so in males, less so in females). Antennae (fig. 195) moderately long (pl/al c. 1.13), relatively thick (ab/al c. 0.10). Mid part of mentum flat, with wide and shallow concavities on sides, lateral wings very small (fig. 178). On the underside of head, anterior to stridulatory gula transverse, fairly deep pit occupying c. 2/3 head width (fig. 177). Genal canthus equal to or narrower than eyes. Pronotum sides slightly rounded and widely bordered, only along the bordering a shallow gutter; anterior angles moderately produced anterad; bordering of anterior margin and base of pronotum widely interrupted in middle; pronotum base doubly sinuately emarginate; posterior angles produced, nearly straight, slightly protruding outwards (fig. 176). Prosternal process very widely bordered, strongly protruding towards metasternum (fig. 194). Mesosternum with a shallow gutter in middle. Elytral humeri strongly convex, protruding outwards; anterior margin of elytra not bordered, slightly convex anterad (fig. 180). Elytral rows very shallow, delicately marked; in the posterior part of elytra rows connected in the following way: 1-9, 2-7, 3-6, 4-5, 8 free (fig. 181); punctures in rows fine, elongate. Elytral epipleura flat, widest at the level of humeri, narrowing regularly towards apex. Male fore and mid tarsi strongly widened; shiny, bare gutters on the underside of tarsi in males on 4 ft, 4 mt, 2-3 ht, in females on 2-4 ft, 2-4 mt, 2-3 ht (figs. 181-187). Male fore tibiae widened, on the inside a fairly deep, longitudinal concavity, outer apical angle straight, slightly protruding outwards, outer margin of fore tibiae simple (figs 188, 189), female fore tibia as in fig. 190. Male mid tibia with 2 apical denticles on the inner margin (figs 192, 193), male hind tibia as in fig. 191. Structure of female copulatory apparatus as in the remaining melanocratoid *Platynotina*.

DISTRIBUTION (fig. 196)

SE Madagascar.

TYPES

Holotype (male); MNHN; "Muséum Paris Coll. P. ARDOIN 1978; Institut Scientifique Madagascar; 2850; Andohahelo 1500 m. R.P.; 217".

Paratypes: Institut Scientifique Madagascar; Andohahelo 1500 m. R.P., (TM) 4 f.

***Sebastianus* gen. nov.**

Name derivation: in honour of an outstanding coleopterist Sebastian EDRÖDY-YOUNGA, who helped me very much with this revision.

Type species: *Melanocratus major*, FAIRMAIRE, 1899; gender masculine.

DIAGNOSIS

Sebastianus resembles the genera *Doyenus* and *Styphacus* (base of elytra bordered, denticles on the outer margin of mid tibiae). It differs in the structure of male mid tibia, which is slightly emarginate on the inner side (in *S. ovoideus* nearly



196. Distribution of *Madobalus rotundicollis* (black squares), *Pokryszkiella cornuta* (white square), *Styphacus decorsei* (white circles) and *S. phreneticus* (black circle)

hammer-shaped, like in the genus *Melanocratus*) and the presence of large tubercles on the male abdominal ventrites (present also in *D. uncus*).

DESCRIPTION

Large species (16.0-25.0 mm). Body black, shiny, only pronotum mat, with a greasy sheen; underside, legs and antennae dark brown, strongly shiny. Body poorly convex, flattened; sides of elytra and pronotum rounded. Genal canthus wider than eyes. Mid part of mentum rather wide, narrowing anterad, its middle distinctly convex; lateral wings well developed. Bordering of pronotal base complete, irregular in middle; bordering of anterior margin blurred in middle; base arcuate, almost straight. Anterior margin of elytra partly bordered, slightly convex, protruding above scutellum; elytral rows well visible, intervals not convex; epipleura flat, at the level of 4-5 abdominal ventrites widened (fig. 206) and delicately bordered (inner margin, at ventrites). Prosternal process in middle evenly convex, bordering laterally well visible. In middle of male abdominal ventrites I and II (sometimes III) tubercles; on all ventrites longitudinal, deep wrinkles (in females blurred, less distinct). On fore tibiae in both sexes an apical denticle and additional median denticle on the outer margin. On the outer side of mid tibiae 2 denticulate ridges. Fore femora not widened, male hind femora simple. General structure of aedeagus and female copulatory apparatus as in the remaining melanocratoid *Platynotina*.

DISTRIBUTION

S and SW Madagascar.

KEY TO SPECIES

1. Posterior angles of pronotum straight or sharp, protruding outwards (figs 197, 228) ... 2.
- Posterior angles of pronotum obtuse, not protruding outwards (figs 219, 231, 242, 243) 3.
2. Male abdominal ventrite I between insertions of hind coxae strongly convex, in middle of the convexity a tubercle, other abdominal ventrites with no tubercles (figs 200, 201); male hind tibiae as in figs 213, 214 *major*
- Male abdominal ventrite I between insertions of hind coxae flat, in middle of ventrite I a large tubercle, in middle of ventrites II and III small tubercles (figs 229, 230); male hind tibiae as in figs 226, 227 *projectus*
3. Pronotum sides regularly rounded (figs 219, 231, 232); tubercles on male abdominal ventrites rounded (figs 220, 221, 240, 241) 4.
- Pronotum oval, sides irregularly rounded (figs 242, 243); tubercles on male abdominal ventrites keel-like elongate (figs 252, 253) *ovoideus*
4. Pronotum as in fig. 219, pl/pb = 0.66-0.67; tubercles present on male ventrites I and II (figs 220, 221); male hind tibiae as in figs 223, 224 *magnus*
- Pronotum as in figs 231, 232, pl/pb = 0.57-0.63; tubercles present on male ventrites I, II and III (figs 240, 241); male hind tibiae as in figs 236, 237 *simplex*

Sebastianus major (FAIRMAIRE, 1899) comb. nov.

Melanocratus major FAIRMAIRE, 1899: 533; GEBIEN 1910: 307; 1938: 411; ARDOIN 1969: 461.

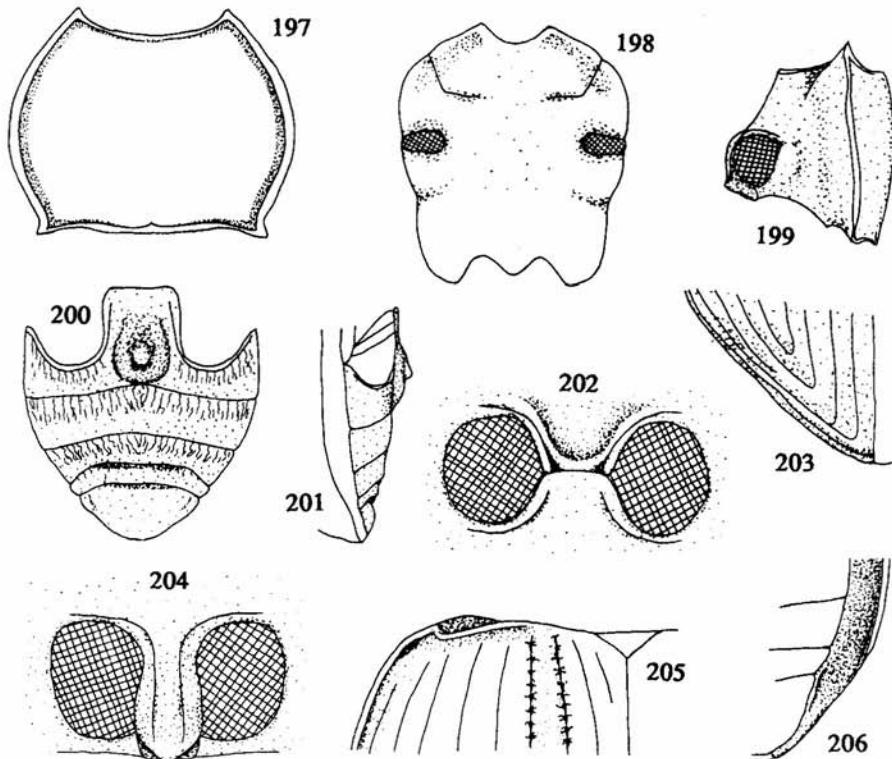
Terra typica: Madagascar.

DIAGNOSIS

S. major is similar to *S. projectus* (pronotum structure - anterior angles sharp, produced anterad; posterior angles straight or sharp, protruding outwards). The two species differ in the structure of male abdominal vetrites and hind tibiae.

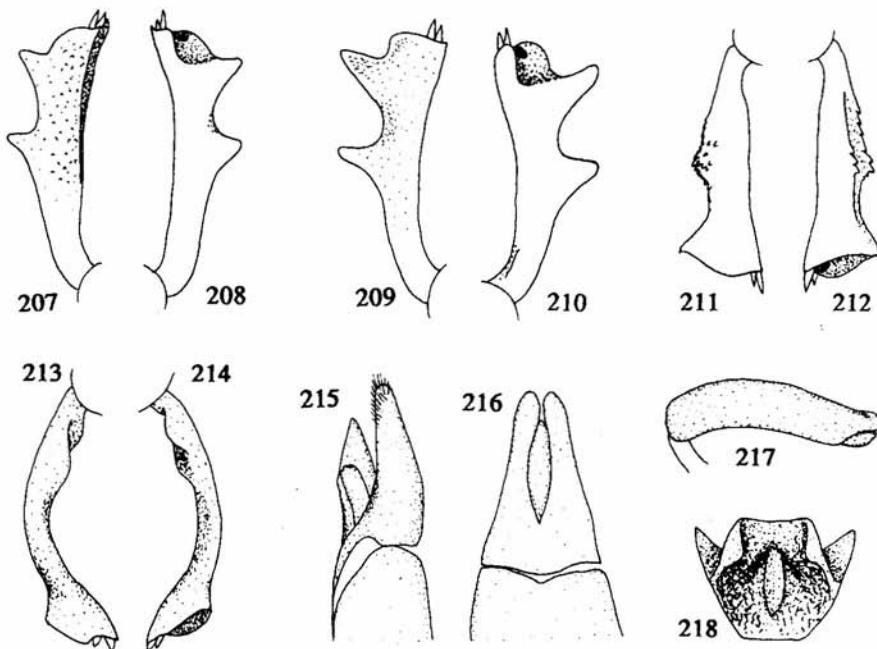
DESCRIPTION

Body length 17.0-24.0 mm, $pl/pb = 0.63-0.72$, $el/eb = 1.33-1.60$, $el/pl = 2.28-2.43$, $eb/pb = 1.06-1.11$. Head as in fig. 198; strongly, distinctly punctate. Antennae



197-206. *Sebastianus major*: 197 - pronotum, 198 - head, 199 - pronotum in lateral view, 200-201 - male abdomen: 200 - ventral, 201 - lateral, 202 - mesosternum, 203 - apex of elytron, 204 - prosternum, 205 - anterior part of elytron, 206 - elytral epipleuron

moderately long (pl/al c. 1.38), relatively thick (ab/al c. 0.08). Mid part of mentum with a distinct, blunt convexity in middle (fig. 218). Pronotum sides in both sexes strongly rounded, widest in middle; anterior angles of pronotum sharp, strongly produced anterad; posterior angles straight or sharp, protruding outwards (fig. 197). Pronotum puncturation delicate; along the bordering, especially on sides, a shallow gutter. Prosternal process protruding towards metasternum (fig. 199); bordering interrupted at apex (fig. 204). In middle of mesosternum a deep gutter; lateral margins of mesosternal process between insertions of mid coxae strongly convex (fig. 202). Elytral humeral angles rounded, margin convex (fig. 205). Elytral rows distinct, not very deep, punctures well visible; in the posterior part of elytra rows connected in the following way: 1-9, 2-8, 3-6, 4-5, 7 free (fig. 203); intervals moderately convex, distinctly punctate. Male abdominal ventrite I in middle strongly convex, on the convexity additionally a tubercle, on ventrite II a very small, barely visible tubercle (figs 200, 201). Shiny, bare gutters on the underside of tarsi in males on 1-4 ft, 1-4 mt, 1-3 ht, in females on 1-4 ft, 1-4 mt, 1-3 ht. On the inner side of male fore tibia a gutter (figs 207, 208), female fore tibiae as in figs 209, 210; mid tibiae as in figs 211, 212. Male hind tibia strongly bent inwards, with 2 blunt denticles at base (figs 213, 214). Apical part of aedeagus relatively short, l.b.p./l.a.p. c. 2.33 (figs 215, 216).

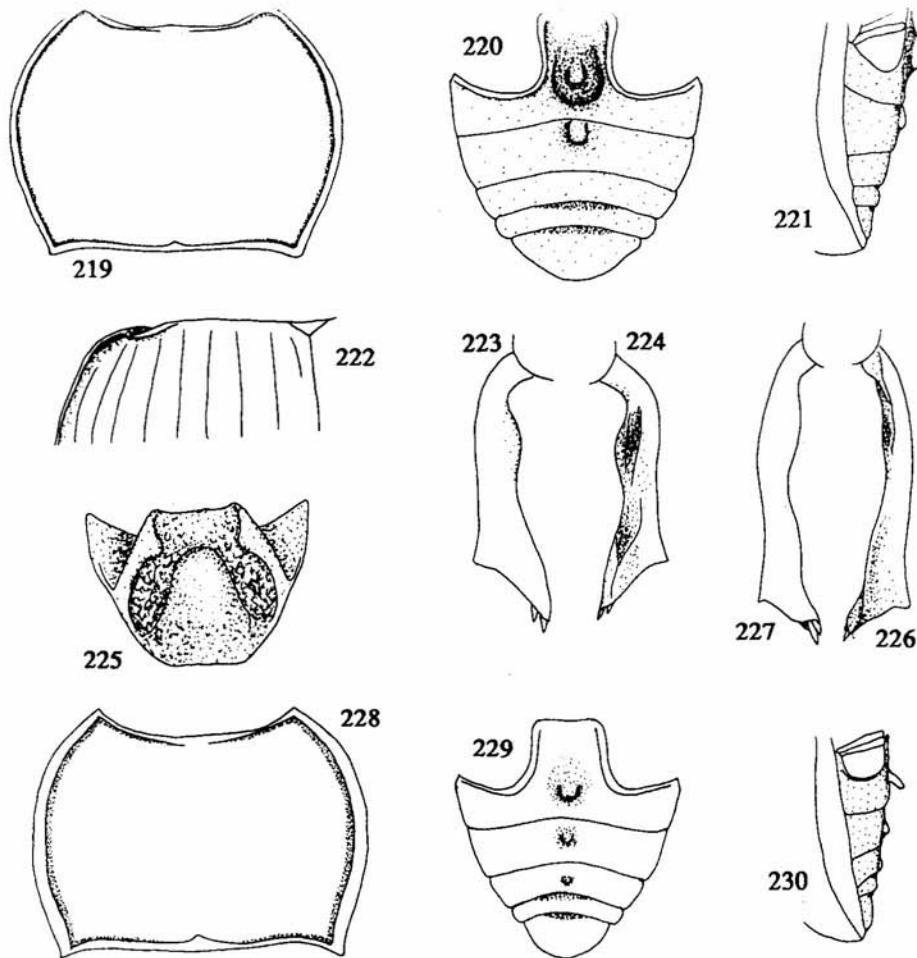


207-218. *Sebastianus major*: 207-208 - male protibia: 207 - ventral, 208 - dorsal, 209-210 - female protibia: 209 - ventral, 210 - dorsal, 211-212 - male mesotibia: 211 - ventral, 212 - dorsal, 213-214 - male hindtibia: 213 - ventral, 214 - dorsal, 215-216 - apex of aedeagus: 215 - lateral, 216 - ventral, 217 - male profemur, 218 - mentum

DISTRIBUTION (fig. 254)
SW Madagascar.

MATERIAL EXAMINED

Muséum Paris, Coll. P. ARDOIN; *Melanocratus major* FRM. 1956 P. ARDOIN det.; comparé au type; Muséum Paris, Madagascar, GRANDIDIER 1875, (MNHN) 1 m, 2 f;



219-225. *Sebastianus magnus*: 219 - pronotum, 220-221 - male abdomen, 220 - ventral, 221 - lateral, 222 - anterior part of elytron, 223-224 - male metatibia: 223 - ventral, 224 - dorsal, 225 - mentum; 226-230.

S. projectus: 228 - pronotum, 229-230 - male abdomen: 229 - ventral, 230 - lateral

Madagascar Sud-Ouest, Tuléar - Sakaraha Zombitsy 630 m XII-59 Raharizonina; Institut Scientifique Madagascar, (MNHN) 2 m, 1 f; Muséum Paris, Madagascar, GRANDIDIER 1867; 639, 67, (MNHN) 1 m, 1 f; Muséum Paris, Madagascar, Ikongo, G. GRANDIDIER 1902, (MNHN) 7 m, 12 f; Muséum Paris, Madagascar, Prov de Tulear, G. PETIT 1926, (MNHN) 3 m, 1 f; Institut Scientifique Madagascar; Madagascar Sud Tuléar - 57 GRUVEL, (MNHN) 4 m, 5 f; Muséum Paris, Madagascar (S.-O.), Plaines de Fiherena, F. GEAY 1905, (MNHN) 6 m, 11 f; Muséum Paris, Madagascar, F. GEAY, (MNHN) 1 m, 2 f; Muséum Paris; Madagascar Sud, envir. de Tuléar plat. calc. ca S.E. de Miary 40 m, 23/27-I-1969 P. VIETTE et P. GRIVEAUD, (MNHN) 1 m; Muséum Paris; Madagascar Ouest, Réserve spéciale du Zombitsy matsabory, 640 m 11/15-I-1969 P. VIETTE et P. GRIVEAUD, (MNHN) 1 m; S.W. Madagascar, Andranohinaly, Waldgeoiet II.1904 VOELTZKOW S.; *Melanocratus major* FRM.; Sammlung H. GEBIEN; *major* FRM. det KASZAB; 372 (TMB) 1 m; Muséum Paris, Madagascar G. PETIT 1927; de Fanérise Soanierana, (MNHN) 2 m; Madagascar, I.1956 C. KOCH leg.; Ankororoka, Tulear Distr., (TM) 7 m, 5 f; Madagascar, I.1956 C. KOCH leg.; Ambilalialika, Betioky Distr., (TM) 1 m; Institut Scientifique Madagascar; Tongobory Sept - LACS A.R., (MNHN) 1 m, 5 f; Muséum Paris, Coll. P. ARDOIN 1978; *Melanocratus major* FAIRM. P. ARDOIN det. 1966; cum typo comparatum; 2859; Inst. Scient., Madagascar, Lac Tsimanampetsotsa, Andranomby, 20-VII-48 R.P., (MNHN) 1 m; S.W. Madagascar, N. Mahafaly, (TMB) 1 m; Muséum Paris, Coll. P. ARDOIN 1978; Mars 1956, Belo Sur Tsiribihina, Madagascar, (MNHN) 1 f; Muséum Paris; Madagascar Sud, S. du plat. Mahafaly, 50 km O. Ampanihy, A. PEYRIERAS, V-1972, (MNHN) 2 f; Institut Scientifique Madagascar; Lac Tsimanampetsotsa - V-51 R.P.; Muséum Paris, (MNHN) 3 f; Juin; Muséum Paris, Madagascar, Andarahomana (Entre Fort Dauphin et le Cap Sainte Marie), R. DECARY 1926, (MNHN) 1 f; Muséum Paris, Madagascar Sud - Ouest, Perrier Dela Bathie 1911, (MNHN) 1 f; Madagascar, I.1956 C. KOCH leg.; Tongobory Betioky Distr., (TM) 1 m, 3 f; Madagascar Sud, Ankazomateila, 28.1.1995, Route Betioky-Beheloka, 200 m, savanne sous pierres et troncs morts, J. JANAK leg., (HBC) 6 m, 6 f; Madagascar, Toliara distr., Saint Augustin, 28.1.-6.2.1995, Ivo JENIS leg., (HBC) 2 m, 1 f; Madagascar Sud, Route Sakahara-Tongobory, 26.1.1995, J. JANAK lgt., (HBC) 1 m, 3 f.

TYPES

Melanocratus major FAIRMAIRE, 1899 - lectotype (male); MNHN; "Type; Muséum Paris, Madagascar, GRANDIDIER 1875; *Melanocratus major* FRM. Madagascar; Muséum Paris 1906, Coll. Léon FAIRMAIRE" and paralectotypes: "Type; Muséum Paris, Madagascar, GRANDIDIER 1875; *Melanocratus major* FRM.; Muséum Paris 1906, Coll. Léon FAIRMAIRE" (MNHN) 2 f; "Muséum Paris, Coll. Ch. ALLUAUD; *Melanocratus major* FRM.; Madagascar Centre - Sud ALLUAUD 1901. 84" (MNHN) 1 m; "Muséum Paris, Coll. Ch. ALLUAUD; *Melanocratus ovoideus* FRM.; Madagascar Centre - Sud ALLUAUD 1901. 84." (MNHN) 1 f (present designation).

Sebastianus projectus sp. ov.

Name derivation: *projectus* - Latin: protruding.

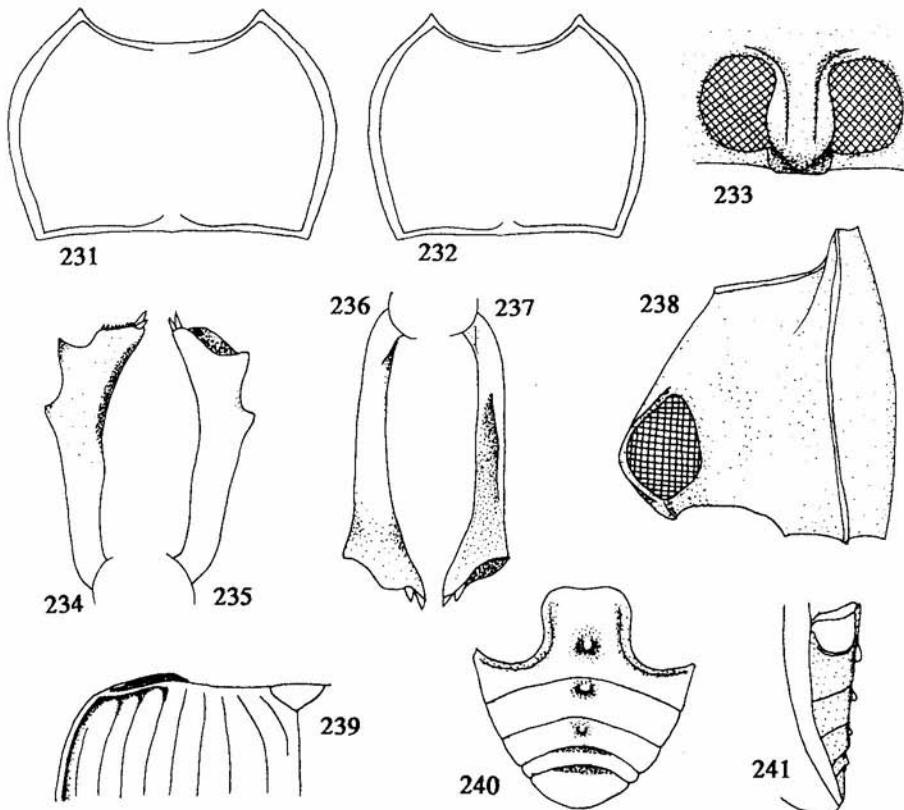
Locus typicus: Androka (Madagascar).

DIAGNOSIS

S. projectus resembles *S. major* in structure of hind angles of pronotum. The structure of hind tibiae and the presence of tubercles on the first three male abdominal ventrites place *S. projectus* close to *S. simplex* and *S. ovoideus*. It differs in the structure of pronotum and the shape of abdominal tubercles.

DESCRIPTION

Body length 16.0-19.0 mm, pl/pb = 0.61-0.66, el/eb = 1.38-1.52, el/pl = 2.23-2.60, eb/pb = 1.06-1.10. Head distinctly punctate. Antennae relatively long (pl/al c.



231-241. *Sebastianus simplex*: 231-232 - pronotum: 231 - female, 232 - male, 233 - prosternum, 234-235 - male protibia: 234 - ventral, 235 - dorsal, 236-237 - male metatibia: 236 - ventral, 237 - dorsal, 238 - pronotum in lateral view, 239 - anterior part of elytron, 240-241 - male abdomen: 240 - ventral, 241 - lateral

1.17), moderately thick (ab/al c. 0.07). Mid part of mentum with a distinct blunt convexity in middle. Sides of pronotum rounded, widest in middle. Anterior angles of pronotum sharp, strongly produced anterad; posterior angles straight or sharp, protruding outwards (fig. 228). Pronotum puncturation delicate; along the bordering, especially on sides, a shallow gutter. Prosternal process blunt, somewhat protruding towards metasternum; bordering interrupted at apex. In middle of mesosternum a shallow gutter; lateral margin of mesosternal process between insertions of mid coxae moderately convex. Elytral humeral angles almost straight, margin strongly convex. Elytral rows distinct, not very deep, punctures poorly visible; in the posterior part of elytra rows connected as in *S. major*, intervals moderately convex, distinctly punctate. The first three abdominal ventrites provided with tubercles - tubercle on ventrite I very well developed, strongly obliquely protruding posterad; tubercles of ventrites II and III smaller, more flattened (figs 229, 230). Structure of tarsi as in *S. major*. On the inner side of male fore tibia a gutter. Male hind tibia slightly bent inwards, almost straight, with 2 protuberances at base (figs 226, 227). Apical part of aedeagus short, l.b.p./l.a.p. c. 2.41.

DISTRIBUTION (fig. 254)

S Madagascar.

TYPES

Holotype (male); TM; "Madagascar I.1956 C. KOCH leg.; Androka, Ampanihy Distr.".

Paratypes: Muséum Paris; Madagascar Sud, plateau Mahafaly, 11/12 km. Ouest d'Ankalirano, 250 m., 14/17-I-1974, P. VIETTE et A. PEYRIERAS, 37 f, 23 m, 18/31-I-1974 5 m, 6 f (MNHN); Muséum Paris, Coll. P. ARDOIN 1978; 15.V.1948, Sacoa, Betsioky Sud, Tuléar Prov., Madagascar, (MNHN) 1 f; Muséum Paris; Institut Scientifique Madagascar; Itampolo V-51 RP, (MNHN) 4 m; Madagascar I.1956 C. KOCH leg.; Androka, Ampanihy Distr., (TM) 10 m, 20 f, (TMB) 1 m; 16 km. NE of Androka, (TM) 1 m, 3 f; Madagascar I.1956 C. KOCH leg.; SW of Itrobiky, Ampanihy Distr., (TM) 11 m; Madagascar I.1956 C. KOCH leg.; Cap Ste. Marie, Ambovombe Distr., (TM) 1 m, 1 f; Madagascar I.1956 C. KOCH leg.; Antanimora, Ambovombe Distr.; 5 m, 5 f.

Sebastianus simplex sp. nov.

Name derivation: *simplex* - Latin: simple.

Locus typicus: Itampolo (Madagascar).

DIAGOSIS

The structure of hind tibiae and the presence of tubercles on the first three male abdominal ventrites place *S. simplex* close to *S. ovoideus* and *S. projectus* (the shape of the tubercles differs between species). Anterior angles of pronotum in *S. simplex*

are similar to those in *S. major* and *S. projectus* (it differs in posterior angles of pronotum).

DESCRIPTION

Body length 15.0-19.5 mm, pl/pb = 0.57-0.63, el/eb = 1.37-1.46, el/pl = 2.41-2.50, eb/pb = 1.03-1.06. Head distinctly punctate. Antennae moderately long (pl/al c. 1.35), relatively thick (ab/al c. 0.08). Mid part of mentum with a distinct blunt convexity in middle. Sides of pronotum rounded, in male slightly truncate (figs 231, 232). Anterior angles of pronotum sharp, strongly produced anterad; posterior angles straight, not protruding outwards. Pronotum puncturation very delicate, barely visible. Prosternal process blunt, its bordering interrupted at apex (figs 233, 238). In middle of mesosternum a shallow gutter; lateral margins of mesosternal process between insertions of mid coxae somewhat convex. Elytral humeral angles rounded, margin poorly convex (fig. 238). Elytral rows distinct, rather shallow, punctures poorly visible; in the posterior part of elytra rows connected as in *S. major*; intervals moderately convex, distinctly punctate. On the first three male abdominal ventrites tubercles; tubercle of ventrite I well developed; tubercles of ventrites II and III smaller, more flattened (figs 240, 241). Shiny, bare gutters on the underside of tarsi as in *S. major*. Male fore tibia on the inside smooth, with no gutter (figs 234, 235). Male hind tibia nearly straight, with a concavity on the inner side (figs 236, 237). Apical part of aedeagus relatively long, l.b.p./l.a.p. c. 1.91.

DISTRIBUTION (fig. 254)

S Madagascar.

TYPES

Holotype (male); TM; "Madagascar I.1956. C. KOCH leg.; Itampolo, Ampanihy Distr.".

Paratypes: Madagascar I.1956. C. KOCH leg.; Itampolo, Ampanihy Distr., (TM) 4, 11 f, (TMB) 2 f; Madagascar I.1956. C. KOCH leg.; Androka, Ampanihy Distr., (TM) 2 m.

Sebastianus magnus sp. nov.

Name derivation: *magnus* - Latin: large, great.

Locus typicus: Ankalirano (Madagascar).

DIAGOSIS

The structure of posterior angles of pronotum places the species close to *S. simplex* and *S. ovoideus*, and the presence of tubercles on abdominal ventrites I and II - to *S. major*. *S. magnus* differs from the remaining species in the structure of male hind tibiae and the number and shape of tubercles on male abdominal ventrites.

are similar to those in *S. major* and *S. projectus* (it differs in posterior angles of pronotum).

DESCRIPTION

Body length 15.0-19.5 mm, pl/pb = 0.57-0.63, el/eb = 1.37-1.46, el/pl = 2.41-2.50, eb/pb = 1.03-1.06. Head distinctly punctate. Antennae moderately long (pl/al c. 1.35), relatively thick (ab/al c. 0.08). Mid part of mentum with a distinct blunt convexity in middle. Sides of pronotum rounded, in male slightly truncate (figs 231, 232). Anterior angles of pronotum sharp, strongly produced anterad; posterior angles straight, not protruding outwards. Pronotum puncturation very delicate, barely visible. Prosternal process blunt, its bordering interrupted at apex (figs 233, 238). In middle of mesosternum a shallow gutter; lateral margins of mesosternal process between insertions of mid coxae somewhat convex. Elytral humeral angles rounded, margin poorly convex (fig. 238). Elytral rows distinct, rather shallow, punctures poorly visible; in the posterior part of elytra rows connected as in *S. major*; intervals moderately convex, distinctly punctate. On the first three male abdominal ventrites tubercles; tubercle of ventrite I well developed; tubercles of ventrites II and III smaller, more flattened (figs 240, 241). Shiny, bare gutters on the underside of tarsi as in *S. major*. Male fore tibia on the inside smooth, with no gutter (figs 234, 235). Male hind tibia nearly straight, with a concavity on the inner side (figs 236, 237). Apical part of aedeagus relatively long, l.b.p./l.a.p. c. 1.91.

DISTRIBUTION (fig. 254)

S Madagascar.

TYPES

Holotype (male); TM; "Madagascar I.1956. C. KOCH leg.; Itampolo, Ampanihy Distr.".

Paratypes: Madagascar I.1956. C. KOCH leg.; Itampolo, Ampanihy Distr., (TM) 4, 11 f, (TMB) 2 f; Madagascar I.1956. C. KOCH leg.; Androka, Ampanihy Distr., (TM) 2 m.

Sebastianus magnus sp. nov.

Name derivation: *magnus* - Latin: large, great.

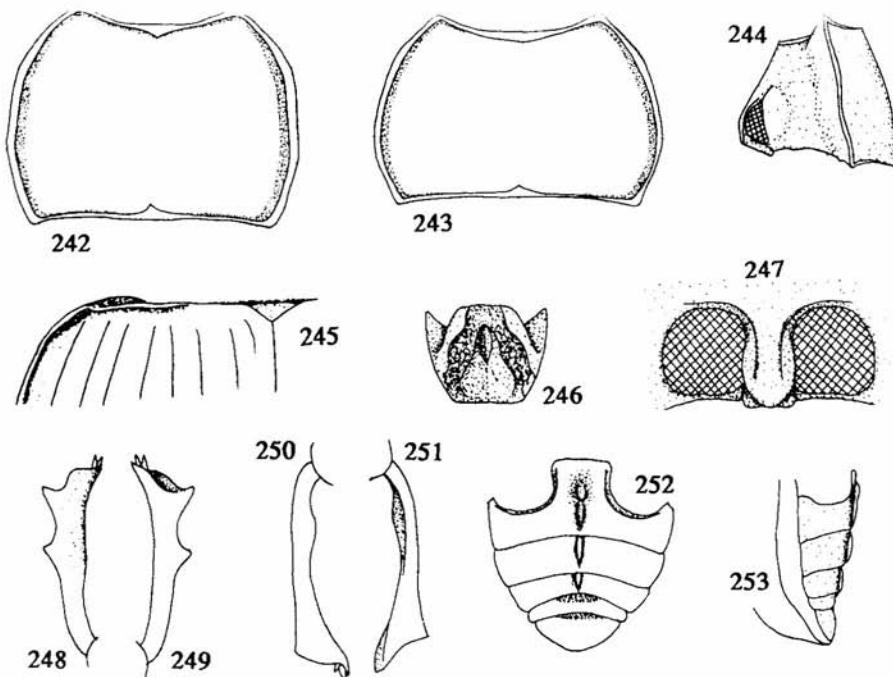
Locus typicus: Ankalirano (Madagascar).

DIAGOSIS

The structure of posterior angles of pornotum places the species close to *S. simplex* and *S. ovoideus*, and the presence of tubercles on abdominal ventrites I and II - to *S. major*. *S. magnus* differs from the remaining species in the structure of male hind tibiae and the number and shape of tubercles on male abdominal ventrites.

DESCRIPTION

Body length 18.0-25.0 mm, $pl/pb = 0.60-0.63$, $el/eb = 1.36-1.44$, $el/pl = 2.32-2.37$, $eb/pb = 1.07-1.09$. Head strongly, distinctly punctate, on frons punctures merge. Antennae moderately long ($pl/al c. 1.33$), very thick ($ab/al c. 0.10$). Mid part of mentum with a distinct, blunt convexity in middle (fig. 225). Sides of pronotum in both sexes evenly rounded (fig. 219); anterior angles of pronotum rounded, poorly produced anterad; posterior angles straight or obtuse, not protruding outwards. Pronotum puncturation delicate, barely visible; along the bordering, especially on sides, a shallow and narrow gutter. Prosternal process somewhat protruding towards metasternum; bordering interrupted at apex. Mesosternum in middle with a shallow gutter; lateral margins of mesosternal process between insertions of mid coxae moderately convex. Elytral humeral angles rounded, margin slightly convex (fig. 222). Elytral rows distinct, not very deep, punctures poorly visible; in the posterior part of elytra rows connected as in *S. major*; intervals poorly convex, distinctly punctate, on sides wrinkled. Male abdominal ventrite I strongly convex in middle; on the convexity additionally a tubercle, on abdominal ventrite II a well developed tubercle (figs 220, 221). Male fore tibia with a gutter on the inner side.



242-253. *Sebastianus ovoideus*: 242-243 - pronotum: 242 - male, 243 - female, 244 - pronotum in lateral view, 245 - anterior part of elytron, 246 - mentum, 247 - prosternum, 248-249 - male protibia: 248 - ventral, 249 - lateral, 250-251 - male metatibia: 250 - ventral, 251 - dorsal, 252-253 - male abdomen: 252 - ventral, 253 - lateral

Male hind tibia very massive, slightly bent inwards, almost straight, with a widening at base (figs 223, 224). Apical part of aedeagus relatively short, l.b.p./l.a.p. c. 2.37.

DISTRIBUTION (fig. 254)

S Madagascar.

TYPES

Holotype (male); MNHN; "Muséum Paris; Madagascar Sud, plateau Mahafaly, 11/12 km. Ouest d'Ankalirano, 250 m., 14/17-I-1964, P. VIETTE et A. PEYRIERAS".

Paratypes: Muséum Paris, Coll. P. ARDOIN 1978; 20.V.1965 Evazy (bush) S.-W. Madagascar L. BIGOT leg., (MNHN) 1 m; Muséum Paris, Coll. P. ARDOIN 1978; III.1969 Entre Ampanihy et Androka, Madagascar S.W. PEYRIERAS, (MNHN) 1 f; Muséum Paris; Madagascar Sud, plateau Mahafaly, 11/12 km. Ouest d'Ankalirano, 250 m., P. VIETTE et A. PEYRIERAS, (MNHN) 18 m, 25 f (14/17-I-1964), (MNHN) 12 m, 9 f (1/6-II-1964), (MNHN) 20 m, 32 f (18/31-II-1964); Madagascar Sud S. du plat. Mahafaly 50 km. O. Ampanihy A. PEYRIERAS, V-1972; Muséum Paris, (MNHN) 7 f; Madagascar Sud, S.E. de Tranomaro, Androatsabo, 400 m. PEYRIERAS, XII-1971; Muséum Paris, Madagascar Est mission C.N.R.S. R.C.P. n 225, (MNHN) 1 f; Institut Scientifique Madagascar; Lac Tsimanampetsotsa - V-51 R.P.; Muséum Paris, Coll. P. ARDOIN 1978 (MNHN) 2 m; Madagascar I.1956 C. KOCH leg.; Itampolo, Ampanihy Distr., (TM) 5 m, 3 f, (NMB) 1 m, 2 f, Madagascar I.1956 C. KOCH leg.; S.W. of Itrobiky, Ampanihy Distr., (TM) 2 m, 1 f, Institut Scientifique Madagascar; Lac Tsimanampetsotsa - V-51 R.P.; Muséum Paris, (MNHN) 3 f; Madagascar I.1956 C. KOCH leg.; Efoetsy, Betioky Distr., (TM) 3 m, 1 f, Madagascar I.1956 C. KOCH leg.; Ambilalialika, Betioky Distr., (TM) 1 m; Muséum Paris, Analamazoatra, Madagascar, DECARY 1935, (MNHN) 1 f; Muséum Paris, Madagascar, Pays Mahafaly, BASTARD 1900, (MNHN) 1 f; Muséum Paris; Institut Scientifique Madagascar; XII.51 R.P.; Cap Sainte Marie, (MNHN) 1 f.

Sebastinaus ovoideus (FAIRMAIRE, 1902) comb. nov.

Melanocratus ovoideus FAIRMAIRE, 1902: 329; GEBIEN 1910: 307; 1938: 411; ARDOIN 1969: 462.

Terra typica: Plateau de l'Androy (Madagascar).

DIAGOSIS

S. ovoideus resembles *S. projectus* and *S. simplex* (see diagnoses of those species). *S. ovoideus* is distinct in a characteristic shape of pronotum, especially in females. The species differs from its congeners in the structure of hind tibiae and the number and shape of male abdominal ventrites.

DESCRIPTION

Body length 18.0-22.0 mm, pl/pb = 0.60-0.63, el/eb = 1.37-1.38, el/pl = 2.29-2.60, eb/pb = 1.09-1.12. Head distinctly punctate. Antennae moderately long (pl/al c. 1.26), rather thick (ab/al c. 0.09). Mid part of mentum with a longitudinal, keel-like convexity in middle (fig. 246). Sides of pronotum rounded, in male truncate, in female narrowing anterad (widest 1/3 from base) (figs 242, 243). Anterior angles of pronotum rounded, poorly produced anterad; posterior angles obtuse, not protruding outwards. Pronotum puncturation delicate, barely visible; along the bordering, especially on sides, a shallow and narrow gutter. Prosternal process truncate, not protruding towards metasternum; bordering interrupted at apex (figs 244, 247). Mesosternum in middle with a very shallow gutter; lateral margins of mesosternal process between insertions of mid coxae moderately convex. Elytral humeral angles rounded, margin slightly convex (fig. 245). Elytral rows distinct, not very deep, punctures practically invisible; in the posterior part of elytra rows connected as in *S. major*, intervals poorly convex, distinctly punctate, on sides slightly wrinkled. On the first three abdominal ventrites longitudinal, keel-like convex tubercles; tubercle of ventrite I well developed; tubercles of ventrites II and III smaller (figs 252, 253). Shiny, bare gutters on the underside of tarsi as in *S. major*. Male fore tibiae relatively thin, on the inside smooth, with no gutter (figs 248, 249). Male hind tibiae rather slender, nearly straight, with a slight widening at base (figs 250, 251). Apical part of aedeagus relatively short, l.b.p./l.a.p. c. 2.30.

DISTRIBUTION (fig. 254)

S Madagascar.

MATERIAL EXAMINED

Madagascar I.1956 C. KOCH leg.; Androka, Ampanihy Distr., (TM) 5 m, 7 f; Muséum Paris, Madagascar, Prov. de Tuléar, Androka Lieut. GAUDRON 1913, (TM) 2 m, 1 f; Muséum Paris, Coll. P. ARDOIN 1978; 2857; Ampotaka 12 - 19, (MNHN) 1 m.

TYPES

Melanocratus ovoideus FAIRMAIRE, 1902 - holotype (female); MNHN; "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Type; *Melanocratus ovoideus* FAIRM, n.sp; Plateau de l'Androy - Reg. d'Ambovombe" (examined).

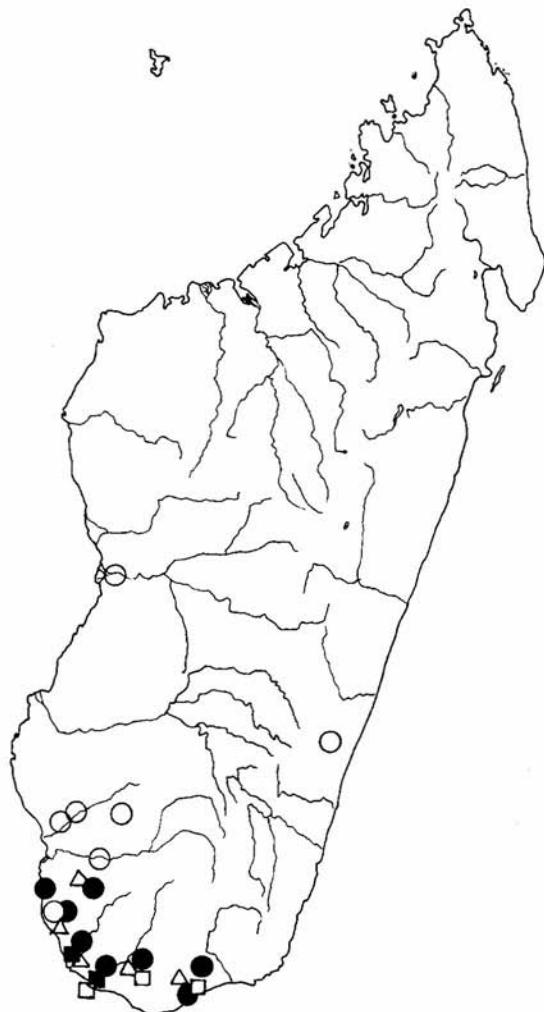
***Styphacus* FAIRMAIRE, 1901**

Styphacus FAIRMAIRE, 1901: 71.

Type species designated by GEBIEN (1938: 411): *Styphacus decorsei* FAIRMAIRE, 1901.

DIAGNOSIS

Styphacus is similar to the genera *Doyenus* and *Sebastianus* (elytral base bordered, outer margin of mid tibiae denticulate). It differs in the structure of elytra (anterior margin not protruding beyond anterior margin of scutellum, on epipleura a concavity).



254. Distribution of *Sebastianus major* (white circles), *S. magnus* (black circles), *S. simplex* (black squares), *S. ovoideus* (white squares) and *S. projectus* (white triangles)

DESCRIPTION

Medium-sized and very large species (12.5-29.0 mm), colour from dark brown to black. Body moderately convex, slender (in *S. phreneticus* sides of elytra strongly rounded, abruptly narrowing towards apex at posterior 1/3 of body). Genal canthus wider than eyes. Mid part of mentum rather wide, in middle distinctly convex; lateral wings well developed, medium-sized. Pronotum elongate ($pl/pb = 0.63-0.79$); sides poorly rounded; base arcuate, almost straight; bordering of anterior margin and base complete, in middle irregular. Prosternal process widely bordered, middle evenly convex. Anterior margin of elytra partly bordered (in *S. kochi* simple, unbordered), poorly convex, not protruding beyond anterior margin of scutellum. Elytral rows well visible, intervals poorly convex, almost flat. Elytral epipleura at the level of abdominal ventrites 4-5 widened; with gutter-like concavities, especially deep in apical part (well developed in males). In posterior part of male elytra, just before apex, a protuberance, in top view in the form of denticle. The shape and size of the denticles vary between species. Male abdominal ventrites with no tubercles, only in *S. decorsei* and *S. phreneticus* on ventrite I a gentle convexity between insertions of hind coxae, in the remaining species convexity practically invisible. On mid tibia 2 denticulate ridges on the outer margin. Male hind femora with a denticle on the inner margin; male hind tibiae almost straight. General structure of aedeagus and female copulatory apparatus as in the remaining melanoceratoid *Platynotina*.

DISTRIBUTION

S Madagascar.

KEY TO SPECIES

1. Anterior margin of elytra bordered (fig. 261) 2.
- Anterior margin of elytra unbordered (fig. 331) *kochi*
2. Male abdominal ventrite I flat; female fore tibia in middle slightly widened and with fine denticles on the outer margin (figs 307, 308), in male straight 3.
- Male abdominal ventrite I in middle slightly convex (fig. 256); fore tibia in both sexes with w median denticle on the outer margin (figs 264, 265, 270, 271), in male slightly bent 5.
3. Elytral apices contacting; male fore tibia thin 4.
- Elytra diverge before apex; male fore tibia widened *neuter*
4. Humeral angle straight; prosternal process protruding *nimius*
- Humeral angle strongly convex, protruding outwards; prosternal process rounded *bartolozzii*
5. Anterior angles of pronotum not protruding outwards (fig. 255); processes on elytral epipleura wide (fig. 260); mid part of mentum slightly narrowing anterad (fig. 259) *decorsei*
- Anterior angles of pronotum protruding outwards (fig. 277); processes on elytral epipleura small, vanishing (fig. 297); mid part of mentum strongly narrowing anterad (fig. 279) *phreneticus*

***Styphacus decorsei* FAIRMAIRE, 1901**

Styphacus Decorsii FAIRMAIRE, 1901: 71.

Styphacus Decorsei FAIRMAIRE: GEBIEN 1910: 308; 1938: 411.

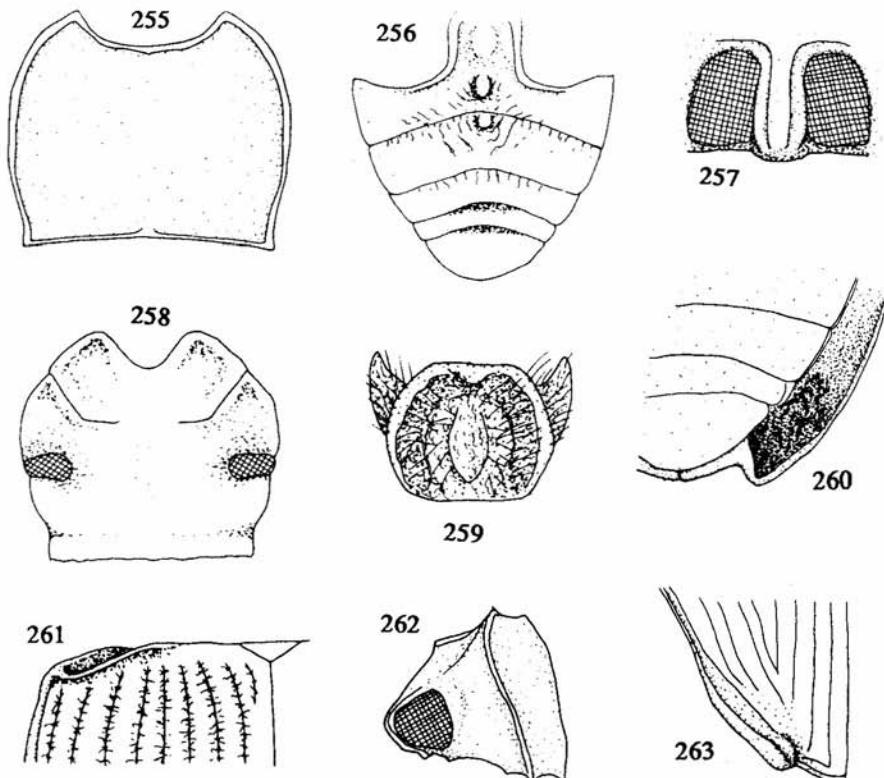
Melanocratus amplicollis FAIRMAIRE, 1902: 329; GEBIEN 1910: 307; 1938: 411, *syn. nov.*

Melanocratus convexicollis FAIRMAIRE, 1902: 330; GEBIEN 1910: 307; 1938: 411, *syn. nov.*

Terra typica: Plateau de l'Androy, as inferred from the title of publication (Madagascar).

DIAGNOSIS

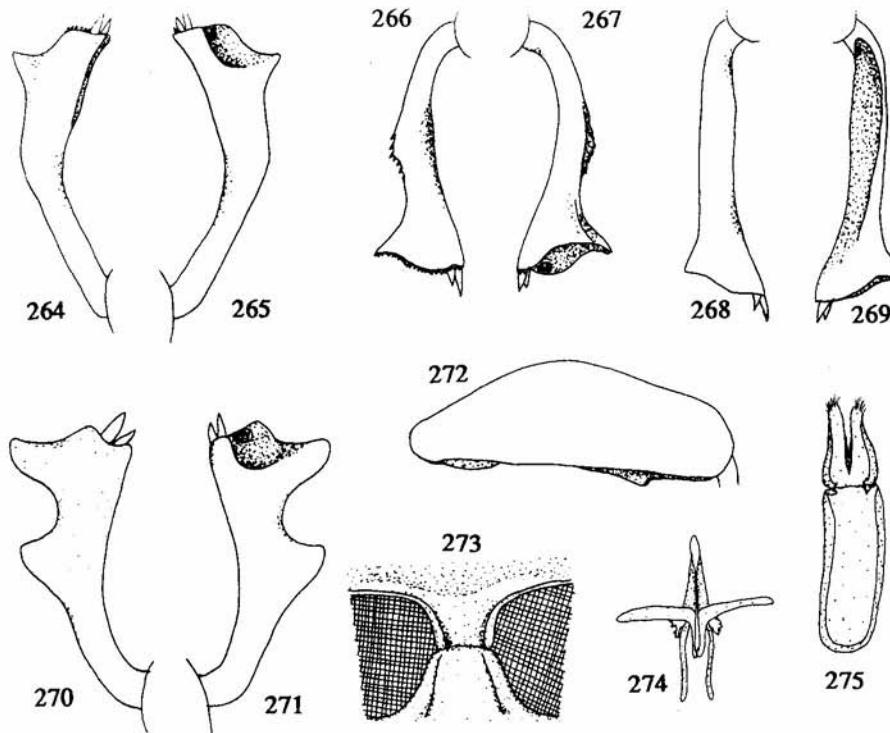
S. decorsei resembles *S. phreneticus* due to the structure of pronotum (gutter along the lateral bordering), fore tibiae (median denticle on the outer margin) and male abdominal ventrite I (slightly convex in middle). The two species differ in the shape of anterior and posterior angles of pronotum, convexity of elytral humeral angles, shape of elytral processes, structure of femora and mentum.



255-263. *Styphacus decorsei*: 255 - pronotum, 256 - male abdomen, 257 - prosternum, 258 - head, 259 - mentum, 260 - elytral epipleuron, 261 - anterior part of elytron, 262 - pronotum in lateral view, 263 - apex of elytron

DESCRIPTION

Body length 19.0-29.0 mm, pl/pb = 0.63-0.71, el/eb = 1.53-1.62, el/pl = 2.64-2.72 (elytra elongate), eb/pb = 1.09-1.17. Body surface slightly shiny, pronotum and underside smooth, puncturation practically invisible. Head elongate, sides of frons and genae at frontal suture with concavities (fig. 258); punctures large, merging. Antennae relatively long (pl/al c. 1.10) and thick (ab/al c. 0.08). Mentum as in fig. 259. Anterior angles of pronotum strongly produced anterad; posterior angles sharp, protruding outwards; along the bordering a narrow and deep gutter (fig. 255). Elytral humeral angles well convex, almost straight (fig. 261). Sides of elytra parallel; punctures in rows small, but distinct; in the posterior part of elytra rows connected in the following way: 1-9, 2-7, 3-6, 4-5, 8 free; intervals flat, nearly not convex, puncturation well visible. Termination of male elytra as in figs 260, 263. Prosternal process truncate, bordering interrupted at apex (figs 257, 262). Mesosternum in middle flat; lateral margins at insertions of mid coxae provided with processes (especially well visible in males) (fig. 273). Male abdominal ventrite I slightly convex in middle. Shiny, bare gutters on the underside of male tarsi on 4 ft, 1-4 mt, 1-



264-273. *Styphacus decorsei*: 264-265 - male protibia: 264 - ventral, 265 - dorsal, 266-267 - male mesotibia: 266 - ventral, 267 - dorsal, 268-269 - male hindtibia: 268 - ventral, 269 - dorsal, 270-271 - female protibia: 270 - ventral, 271 - dorsal, 272 - male metafemur, 273 - prosternum; 274-275. *Styphacus phreneticus*: 274 - penis, 275 - aedeagus (without penis)

3 ht, in females on 1-4 ft, 1-4 mt, 1-3 ht. On fore tibia median denticle on outer margin (figs 270, 271), male fore tibia strongly bent inwards (figs 264, 265), male mid tibia as in figs 266, 267. Male hind femora and tibiae as in figs. 268, 269, 272. Apical part of aedeagus relatively short, l.b.p./l.a.p. c. 2.37 (figs. 274, 275).

DISTRIBUTION (fig. 196)

S Madagascar.

MATERIAL EXAMINED

Styphacus decorsei FM. P. ARDOIN det. 55; comparé au type; Ampotaka Dec. 1919, (TM) 1 m; mai; Muséum Paris, Madagascar S., District. de Tsihombé, Beloha, Lieut. DECARY 1919, (MNHN) 1 f; Slg. R. OBERTHÜR (Coll. C. MARTIN) Eing. Nr. 4, 1956; Plateau de l'Androy Rég. d'Ambovombe, (TMB) 1 f; Madagascar, I.1956 C. KOCH leg., Antonimora, Ambovombe Distr., (TM) 1 f; Muséum Paris; III.69. Anjahantelo - Amboasary, Madagascar Sud., VADON & PEYRIERAS, (MNHN) 5 f; Muséum Paris, Coll. P. ARDOIN 1978; *Melanocratus amplicollis* FAIRM. P. ARDOIN Det. 1969; cum typo comparatum; III.69. Anjahantelo - Amboasary Madagascar Sud. VADON & PEYRIERAS, (MNHN) 5 m, 1 f; *Styphacus decorsei* FAIRM. H.J. BREMER det. 1987. Madagascar, Amboasary, III.1979, (HBC) 1 m, 1 f; I.S. Madagascar, 25-8-47; Inst. Scient. Madagascar R.J. Nr. 34, (TM) 1 f; Institut Scientifique Madagascar; Ifotaka, Amboasary III.57. R.J.E., (TM) 1 f; Muséum Paris, Madagascar, Andrahomana (entre Fort Dauphin et le cap Sainte-Marie) R. DECARY 1926; Juin, (MNHN) 1 m; Muséum Paris, Madagascar, Prov. de Tuléar, Androka, Lieut. GAUDRON 1913, (MNHN) 1 m; Madagascar, I.1956 C. KOCH leg. Antonimora, Ambovombe Distr.; *Styphacus decorsei* FRM. det. ENDRÓDY-YOUNGA, (TM) 1 m; Muséum Paris, Coll. P. ARDOIN 1978; 2856; Ampotaka déc 1919, (MNHN) 1 m; Amboasary Sud, Berenty, Madagascar, I.1981, A. PEYRIERAS (JFC) 1 m, 3 f.

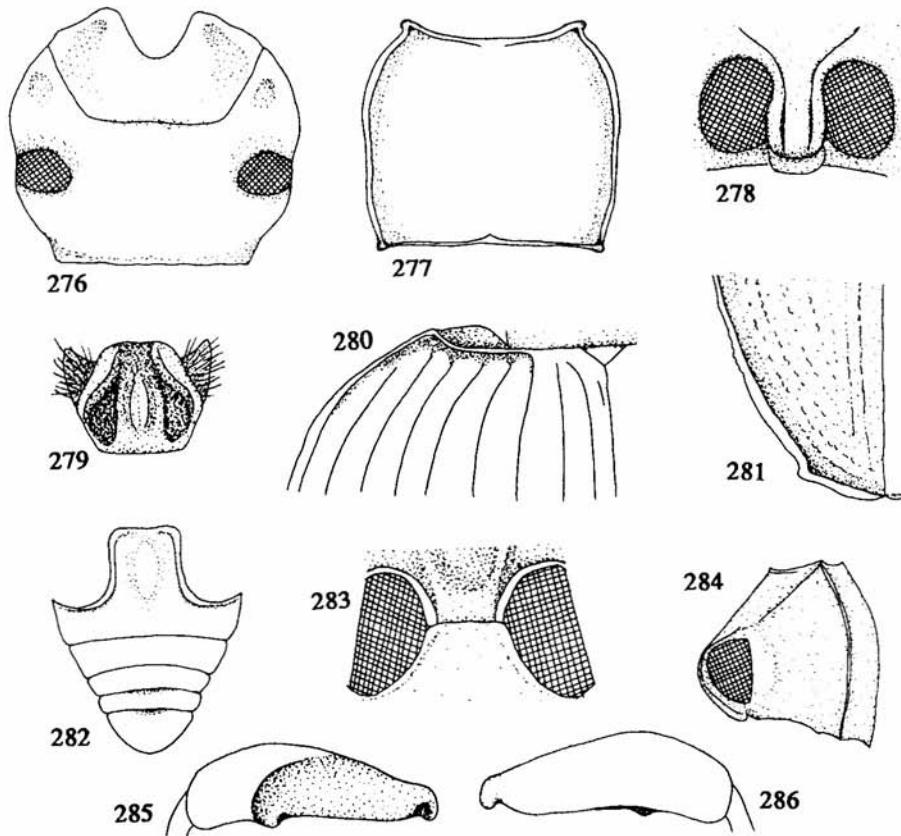
TYPES

Styphacus Decorsii FAIRMAIRE, 1901: 71 - lectotype (male); MNHN; "15 au 30 Janv. 01; Muséum Paris, Madagascar, Androy, Embouchure du Manambovo, Dr. J. DECORSE 1901; *Styphacus decorsii* Fm." and paralectotypes: Muséum Paris, 1906 Coll. Léon FAIRMAIRE; Madagascar; Plateau de l'Androy Rég. d'Ambovombe; type, (MNHN) 1 m; Muséum Paris, 1906 Coll. Léon FAIRMAIRE; L. FAIRMAIRE det. 1903; *Melanocratus decorsii* Fm.; 15 au 30 nov. 00; Muséum Paris, Madagascar, Région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, (MNHN) 1 m; 15 au 30 Janv. 01; Muséum Paris, Madagascar, Région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, *Styphacus decorsii* Fm. (MNHN) 1 m, 2 f; Fév. 1901; Muséum Paris, Madagascar, Androy, Haut Manamboro, Ambatomaiky, Dr. J. DECORSE 1901, (MNHN) 2 m; Muséum Paris, 1906 Coll. Léon FAIRMAIRE; *Styphacus decorsii* Fm.; 15 au 30 Janv. 01; Muséum Paris, Madagascar, Région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, (MNHN) 2 m (present designation).

Melanocratus amplicollis FAIRMAIRE, 1902 - lectotype (female); MNHN; "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; *Melanocratus amplicollis*; Type; du 15 au 30 déc.

1900; Museum Paris Madagascar Région de l'Androy Ambovombe Dr. J. DECORSE 1901" and paratype: Muséum Paris, 1906 Coll. Léon FAIRMAIRE; *Melanocratus amplicollis*; Type; Plateau de l'Androy Rég. d'Ambovombe, (MNHN) 1 f (present designation).

Melanocratus convexicollis FAIRMAIRE, 1902 - holotype (female); MNHN: "Muséum Paris, 1906 Coll. Léon FAIRMAIRE; *Melanocratus convexicollis*; Type; Madagascar Sud. Andrahomana ALLUAUD 1900 XI" (examined).



276-286. *Styphacus phreneticus*: 276 - head, 277 - pronotum, 278 - prosternum, 279 - mentum, 280 - anterior part of elytron, 281 - apex of elytron, 282 - male abdomen, 283 - mesosternum, 284 - pronotum in lateral view, 285-286 - male metafemur: 285 - dorsal, 286 - ventral

Styphacus phreneticus sp. nov.

Name derivation: *phreneticus* - Latin mad, crazy.

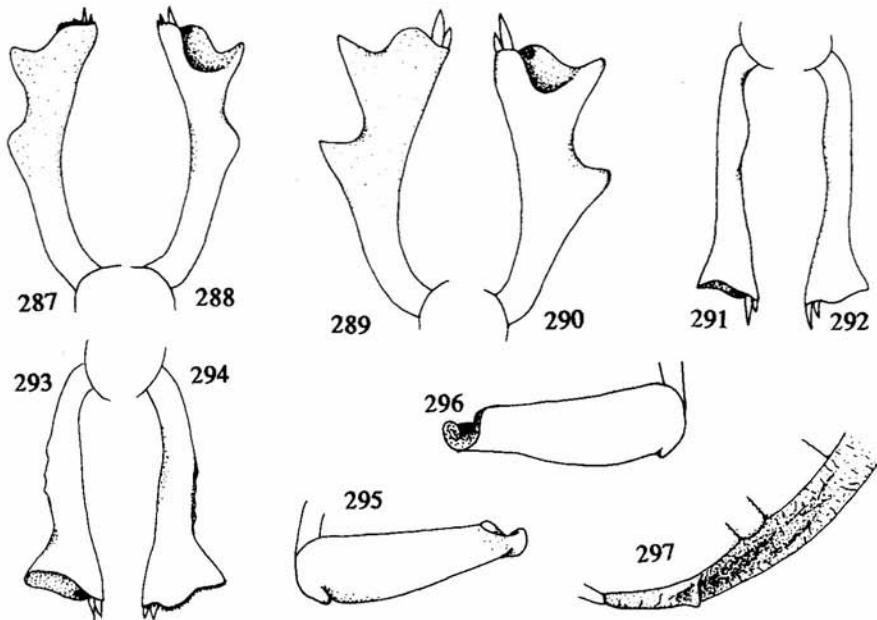
Locus typicus: (probably on the lake) Lac Tsimananpetsotsa (Madagascar)

DIAGNOSIS

See diagnose of *S. decorsei*.

DESCRIPTION

Body length 21.5-22.0 mm, pl/pb = 0.67-0.79, el/eb = 1.30-1.48, el/pl = 2.42-2.58, eb/pb = 1.29-1.33 (pronotum very narrow). Body surface slightly shiny, pronotum and underside smooth, puncturation invisible. Head elongate, sides of frons and genae with concavities at frontal suture; punctures well visible, coalescent (fig. 276). Antennae of medium length (pl/al c. 1.24) and moderately thick (ab/al c. 0.07), mid part of mentum narrowed anterad (fig. 279). Anterior and posterior angles of pronotum terminated with a rounded process which protrudes outwards; along the margin a narrow and deep gutter; sides in female slightly rounded, in male subparallel (fig. 277). Humeral angles of elytra rounded, lateral margin well convex (fig. 280). Sides of elytra rounded, widest at the level of insertions of hind coxae,

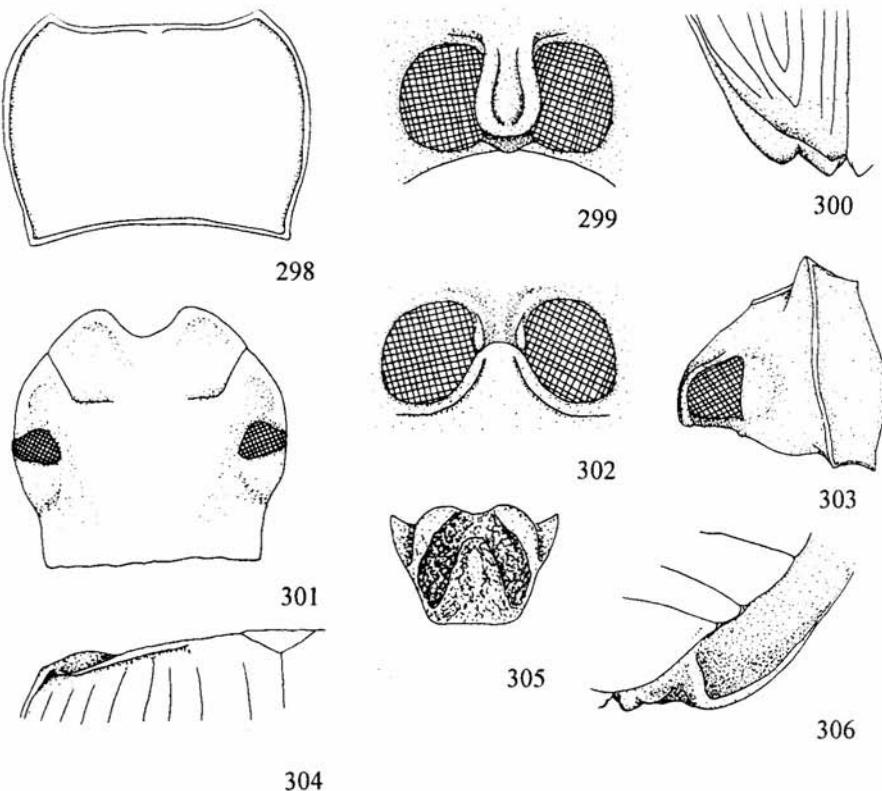


287-297. *Styphacus phreneticus*: 287-290 - protibia: 287 - male, ventral, 288 - male, dorsal, 289 - female, ventral, 290 - female, dorsal, 291-292 - male metatibia: 291 - ventral, 292 - dorsal, 293-194 - male mesotibia: 293 - ventral, 294 - dorsal, 295-296 - male profemur: 295 - ventral, 296 - dorsal, 297 - elytral epipleuron

strongly narrowed towards apex (especially in male which additionally has a concavity on each elytron); punctures in rows fine but distinct, in the posterior part of elytra rows connected as in *S. decorsei*; intervals flat, practically not convex, puncturation poorly visible, process in the terminal part of male elytra very small (figs 281, 297). Prosternal process truncate, its bordering interrupted at apex (figs 278, 284), mesosternum in middle flat (fig. 283). Male abdominal ventrite I in middle slightly convex (fig. 282). Shiny, bare gutters on the underside of tarsi as in *S. decorsei*. Fore tibia with a median denticle on the outer margin (figs 289, 290), in male slightly bent inwards (figs 287, 288), mid tibia as in figs 291, 292. Male fore femur with a denticle on the outer margin (figs 295, 296). Male hind femora and tibiae as in figs 285, 286, 291, 292. Apical part of aedeagus relatively short, l.b.p./l.a.p. c. 2.32.ci p.).

DISTRIBUTION (fig. 196)

SW Madagascar.



298-306. *Styphacuss neuter*: 298 - pronotum, 299 - prosternum, 300 - apex of elytron, 301 - head, 302 - mesosternum, 303 - pronotum in lateral view, 305 - mentum, 306 - elytral epipleuron

TYPES

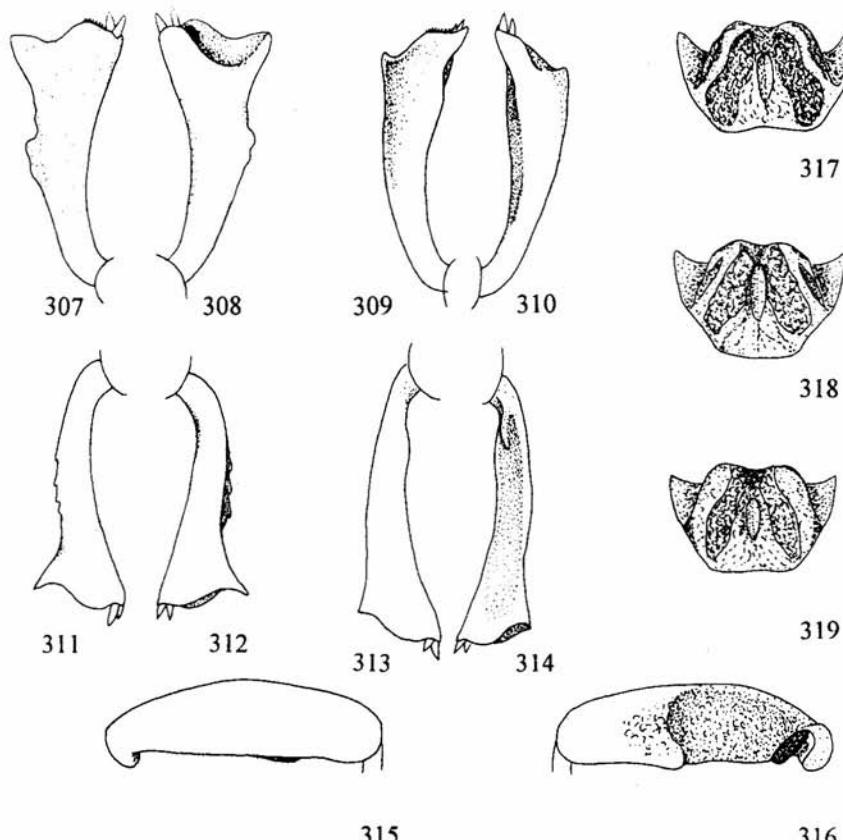
Holotype (male); MNHN; "III.1969., Lac Tsimananpetsotsa, Madagascar S.- W., VADON & PEYRIERAS".

Paratype: III.1969., Lac Tsimananpetsotsa, Madagascar S.- W., Vadon & PEYRIERAS" (MNHN) 1 f.

Styphacus neuter (FAIRMAIRE, 1902) comb. nov.

Melanocratus neuter Fairmaire, 1902: 330; GEBIEN 1938: 411.

Terra typica: Pays Androy Nord (Madagascar).



307-316. *Styphacus neuter*: 307-310 - protibia: 307 - female, ventral, 308 - female, dorsal, 309 - male, ventral, 310 - male, dorsal, 311-312 - male mesotibia: 311 - ventral, 312 - dorsal, 313-314 - male metatibia: 313 - ventral, 314 - dorsal, 315-316 - male metafemur: 315 - ventral, 316 - dorsal; 317-319. *S. nimius*, mentum: 317 - from Vohibory, 318 - from Midongy, 319 - from Tranomaro

DIAGNOSIS

The species resembles *S. bartolozzii* and *S. minimus* in the structure of elytral process, abdominal ventrite I (flat), female fore tibiae (median widening with fine denticles). In *S. neuter*, like in *S. minimus* the humeral angle is poorly convex and the prosternal process strongly protrudes towards mesosternum. *S. neuter* differs from both the species just named in the presence of emargination at the apex of elytra (well developed in males) and in the structure of mentum.

DESCRIPTION

Body length 15.5-20.0 mm, pl/pb = 0.64-0.71, el/eb = 1.49-1.58, el/pl = 2.36-2.56, eb/pb = 1.07-1.13. Body surface slightly shiny, pronotum with a greasy sheen; puncturation very delicate, poorly visible. Head puncturation distinct (fig. 301). Antennae relatively long (pl/al c. 1.13), and moderately thick (ab/al c. 0.08). Anterior margin of mentum deeply emarginate (fig. 305). Anterior angles of pronotum straight, slightly rounded, posterior angles straight, somewhat protruding outwards; along the bordering a delicate, shallow gutter; sides slightly rounded (fig. 298). Elytral humeral angles straight, somewhat rounded (fig. 304). Sides of elytra nearly parallel; punctures in rows fine but distinct, in the posterior part of elytra rows connected as in *S. decorsei*; intervals flat, practically not convex, puncturation poorly visible; elytral apex emarginate (in male emargination much larger) (figs 300, 306). Prosternal process protrudes towards mesosternum, bordering complete (sometimes slightly blurred at the very apex) (figs 299, 303). In middle of mesosternum a narrow gutter (fig. 302). Shiny, bare gutters on the underside of tarsi in both sexes on 1-4 ft, 1-4 mt, 1-3 ht. Male fore tibiae widened, with a gutter on the inner side (figs 309, 310); in females mid widening with fine denticles on the outside (figs 307, 308); mid and hind tibiae as in figs 313, 314. Male hind femur with a denticle and a concavity on the inner side (figs 315, 316). Apical part of aedeagus very short, l.b.p./l.a.p. c. 2.75.

DISTRIBUTION (fig. 347)

S Madagascar.

MATERIAL EXAMINED

Muséum Paris, Madagascar, Est. mission C.N.R.S. R.C.P. n 225; Madagascar Sud, S.E. de Tranomaro, Androatsabo 400 m, PEYRIERAS. XII 1971, (MNHN) 4 m, 10 f; Muséum Paris, Madagascar Ouest, S.O. d'Ankazoabo, forêt d'Herea, 580 m A. PEYRIERAS. V.1972, (MNHN) 1 f; Muséum Paris; Madagascar Sud., Andrahomana, ALLUAUD 1900 XI, (MNHN) 1 f; Muséum Paris, Madagascar Centre-Sud, ALLUAUD 1900 84, (MNHN) 1 f; Inst. Scient Madagascar, Behara, du 10 au 11-8-48 (A.R.), (TM) 2 m, 1 f; 23 mai 1900; Muséum Paris, Madagascar, Androy, Bas Mandrare de Behara à l'Otrokotroky, Dr. J. DECORSE 1901, (MNHN) 1 m; Muséum Paris, Madagascar, Andrahomana (Entre Fort-Dauphin et le Cap. Sainte Marie) R. DECARY 1926; Juin, (MNHN) 3 f.

TYPES

Melanocratus neuter FAIRMAIRE, 1902 - lectotype (male); MNHN; "Muséum Paris, Coll. Ch. ALLUAUD; Madagascar Sud, Pays Androy Nord, ALLUAUD 1900 26; *Melanocratus neuter*, type" and paralectotypes: Muséum Paris, Coll. Ch. ALLUAUD; Madagascar Sud, Pays Androy Nord, ALLUAUD 1900 26, (MNHN) 1 m, 4 f (present designation).

Styphacus bartolozzii sp. nov.

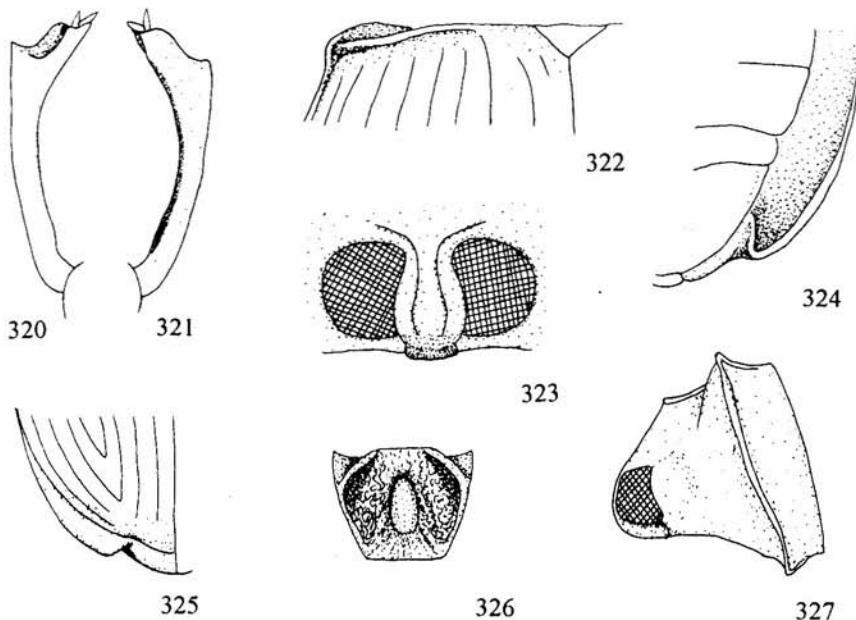
Styphacus bartolozzii (FERRER in litt.)

Name derivation: in honour of Luca BARTOLOZZI, an outstanding specialist of the *Lucanidae*.

Locus typicus: Sakaraha (Madagascar).

DIAGNOSIS

S. bartolozzii resembles *S. neuter* and *S. nimius* (see diagnose of *S. neuter*). It differs from them in the structure of mentum, strongly convex elytral humeral callus and truncate prosternal process.



320-327. *Styphacus bartolozzii*: 320-321 - male protibia: 320 - ventral, 321 - dorsal, 322 - anterior part of elytron, 323 - prosternum, 324 - apex of elytral epipleuron, 325 - apex of elytron, 326 - mentum, 327 - pronotum in lateral view

DESCRIPTION

Body length 16.0-19.0 mm, pl/pb = 0.62-0.67, el/ebs = 1.41-1.60, el/pl = 2.50-2.56, eb/pb = 1.04-1.13. Body surface shiny, pronotum with a greasy sheen; puncturation very delicate, well visible. Head distinctly punctate. Antennae relatively long (pl/al c. 1.11) and moderately thick (ab/al c. 0.08). Anterior margin of mentum simple, in middle strongly convex (fig. 326). Anterior angles of pronotum straight, slightly rounded, posterior angles straight, slightly protruding outwards; sides slightly rounded. Elytral humeral angles strongly convex, protruding outwards (fig. 322). Sides of elytra nearly parallel; punctures in rows small, but distinct; in the posterior part of elytra rows connected as in *S. decorsei*; intervals flat, practically not convex, puncturation poorly visible. Elytral apex in males as in figs 324, 325. Prosternal process truncate, not protruding towards mesosternum (fig. 327), bordering complete (sometimes slightly blurred at the very apex) (fig. 323). In middle of mesosternum a narrow gutter. Shiny, bare gutters on the underside of tarsi as in *S. neuter*. Male fore tibiae narrow, bent inwards (figs 320, 321); in females median widening with fine denticles on the outside. Male hind femur with a denticle and concavity on the inner side. Apical part of aedeagus moderately long, l.b.p./l.a.p. c. 2.37.

DISTRIBUTION (fig. 347)

SW Madagascar.

TYPES

Holotype (male); MZUF (No 7816); "Madagascar 11 km East of Sakaraha (Madagascar West, prefecture of Sakaraha); Dried Forest of Zombitsy, 15.V.1991, L. BARTOLOZZI, S. TAITI and Clarisse RAHARIMINA leg."

Paratypes: Madagascar 11 km East of Sakaraha (Madagascar West, prefecture of Sakaraha); Dried Forest of Zombitsy, 15.V.1991, L. BARTOLOZZI, S. TAITI and Clarisse RAHARIMINA leg. (MZUF, No 7817) 4 ex, (JFC) 1 m, 1 f, Madagascar, I.1956, C. KOCH leg; Lambomakandro, Tuléar Distr., (TM) 1m, 3 f; Muséum Paris, 1935 R. CATALA; Madagascar, Lambomakandro Tuléar, (MNHN) 10 m, 6 f; Institut Scientifique Madagascar; Madagascar Sud-Ouest, Lambomakandro 550 m. Sakarana 4.II.58, P. GRIVEAUD, (TM) 2 m; Muséum Paris; Madagascar Ouest, réserve spéciale du Zombitsy, Est de Sakaraha matsabory, 640 m. 7/10-II-1974, P. VIETTE et A. PEYRIERAS, (MNHN) 1 m, 1 f; Muséum Paris; Institut Scientifique Madagascar; Madagascar Sud-Ouest, Lambomakandro 500 m., Tuléar, VII-57 ANDRIA R., (MNHN) 1 f; Muséum Paris; III.1969, Lac Tsimanampetsotsa, Madagascar S.- W., VADON & PEYRIERAS, (MNHN) 1 m; S.O. Ctr. Madagascar, LJUNGQVIST, (TM) 1 m, 4 f.

***Styphacus nimius* sp. nov.**

Name derivation: *nimius* - Latin: too numerous, excessive.

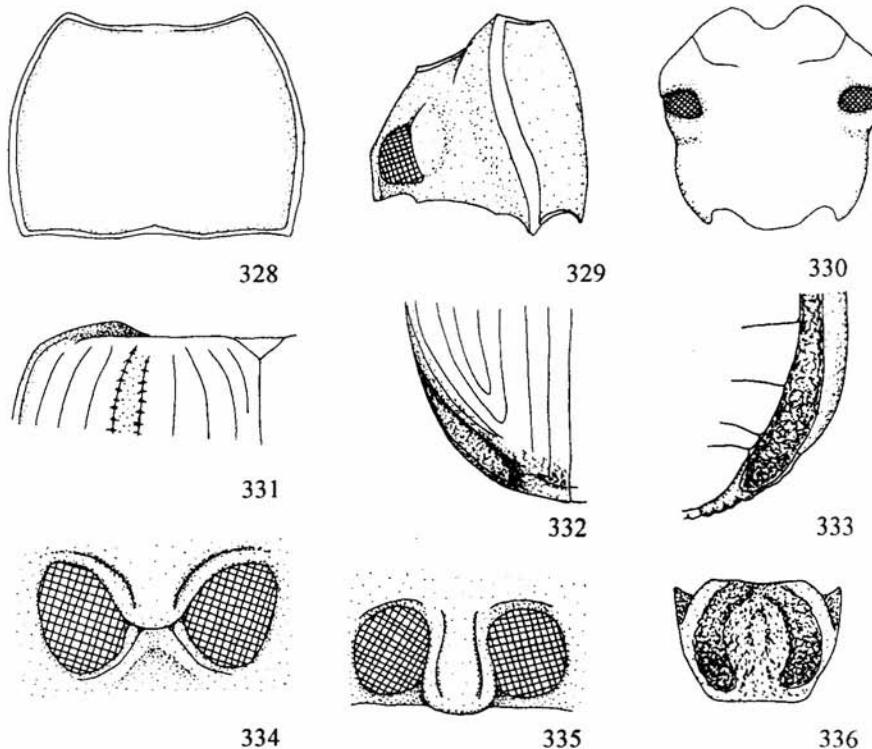
Locus typicus: Androatsabo (Madagascar).

DIAGNOSIS

See diagnoses of *S. neuter* and *S. bartolozzi*.

DESCRIPTION

Body length 12.5-19.0 mm, pl/pb = 0.66-0.70, el/eb = 1.29-1.41, el/pl = 2.15-2.30, eb/pb = 1.10-1.15. Body surface slightly shiny, pronotum with a greasy sheen; puncturation delicate, well visible. Head distinctly punctate. Antennae moderately long (pl/al c. 1.25) and moderately thick (ab/al c. 0.08). Mentum structure rather variable (figs 317-319); anterior margin of mentum shallowly emarginate; mid part narrowing anterad; with a longitudinal keel in middle. Anterior angles of pronotum straight, slightly rounded, posterior angles straight, distinctly protruding outwards; along the bordering a delicate, shallow gutter; sides slightly rounded. Elytral humeral angles rounded. Elytra relatively short; sides nearly parallel; punctures in rows small, but distinct; in the posterior part of elytra rows



328-336. *Styphacus kochi*: 328 - pronotum, 329 - pronotum in lateral view, 330 - head, 331 - anterior part of elytron, 332 - apex of elytron, 333 - elytral epipleuron, 334 - mesosternum, 335 - prosternum, 336 - mentum

connected as in *S. decorsei*; intervals flat, practically not convex, puncturation distinct. Prosternal process protruding towards mesosternum, bordering interrupted at the very apex. In middle of mesosternum a narrow gutter; sides at insertions of mid coxae slightly convex. Shiny, bare gutters on the underside of tarsi as in *S. neuter*. Male fore tibiae narrow, bent inwards; in females median widening with fine denticles. Male hind femur with a denticle and concavity on the inside. Apical part of aedeagus moderately long, l.b.p./l.a.p. c. 1.88.

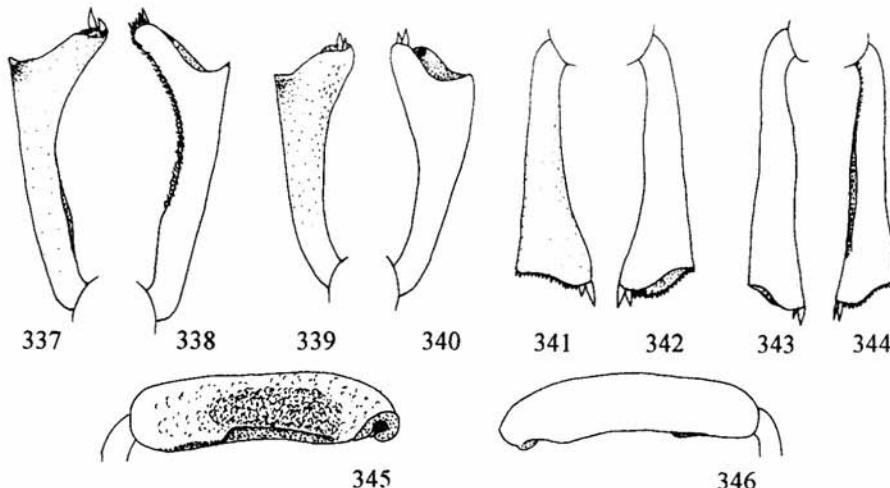
DISTRIBUTION (fig. 347)

S Madagascar.

TYPES

Holotype (male); MNHN; "Muséum Paris; Madagascar Sud, S.E. de Tranomaro, Androatsabo 400 m., A. PEYRIERAS V-1972".

Paratypes: Muséum Paris, Coll. P. ARDOIN 1978; 2860; Institut Scientifique Madagascar; Vohibory (Abadie), (MNHN) 2 m, 1 f, (TM) 4 m, 1 f, (TMB) 1 f; Muséum Paris, Madagascar S. E., Prov de Farafangana, Midongy, du S. 600 A 1000 m R. DECARY 1926, (MNHN) 2 m; S.o. Ctr. Madagascar, - coll. T.M. Pretoria; LJUNGQVIST; (TM) 2 f; Muséum Paris; III.69. Anjahantelo - Amboasary, Madagascar Sud., VADON & PEYRIERAS, (MNHN) 1 m, 3 f; Madagascar Sud, S.E. de Tranomaro, Androatsabo 400 m. PEYRIERAS XII-1971; Muséum Paris, Madagascar Est., mission

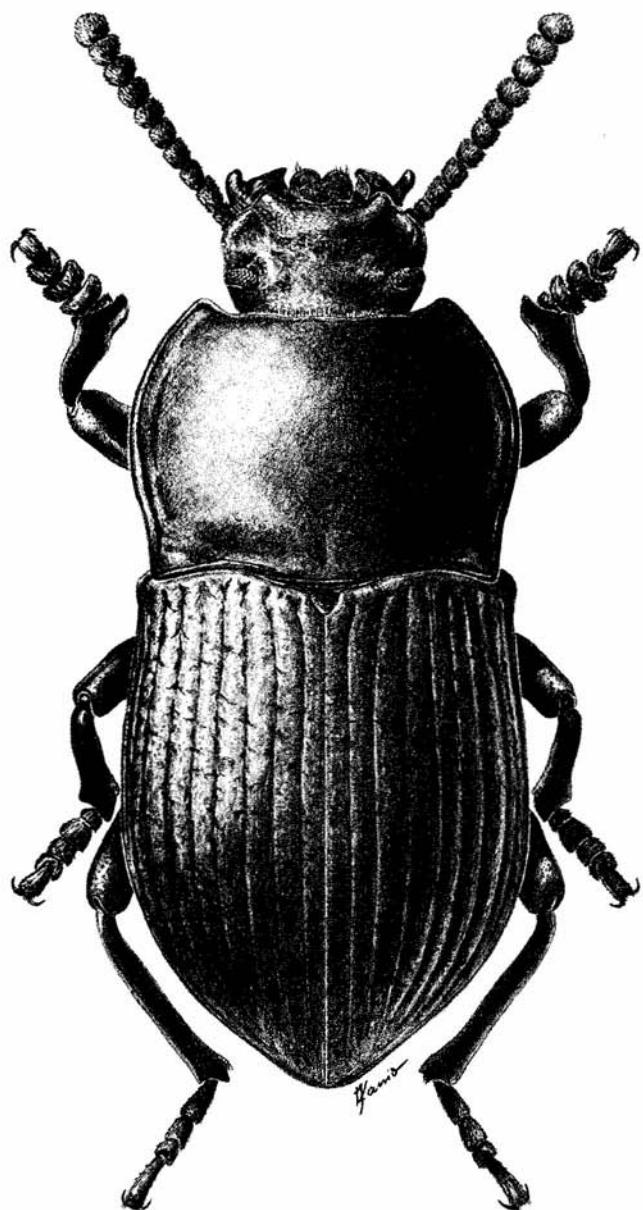


337-346. *Styphacus kochi*: 337-340 - protibia: 337 - male, ventral, 338 - male, dorsal, 339 - female, ventral, 340 - female, dorsal, 341-342 - male mesotibia: 341 - dorsal, 342 - ventral, 343-344 - male metatibia: 343 - ventral, 344 - dorsal, 345-346 - male metasumus: 345 - dorsal, 346 - ventral

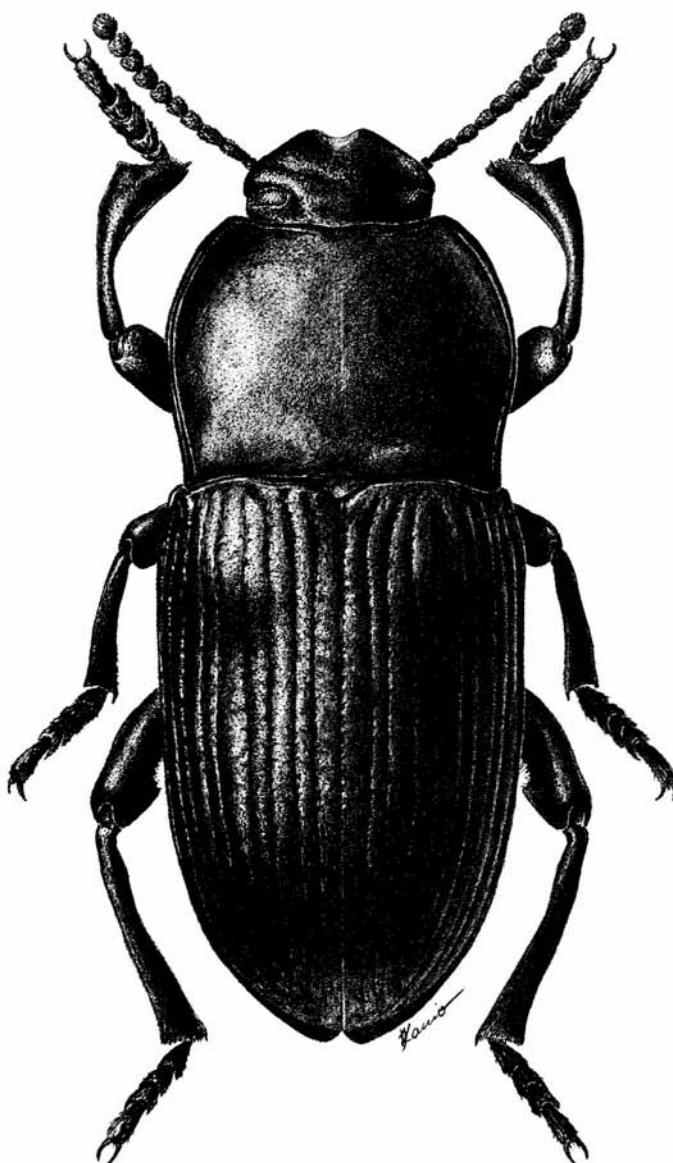
C.N.R.S. R.C.P. n 225, (MNHN) 2 m, 1 f; Muséum Paris; Madagascar Sud S.E. de Tranomaro Androatsabo 400 m. PEYRIERAS V-1971, (MNHN) 1 f; dec 1900 & janv. 01; Muséum Paris, Madagascar, Androy Sept, Imanombo, Cap Vacher 1901, (MNHN) 1 m; 20 Juillet 1900; Muséum Paris, Madagascar, région de l'Androy, Ambovombe, Dr. J. DECORSE 1901, (MNHN) 1 m; Muséum Paris; Institut Scientifique Madagascar; Madagascar-Sud, Fort-Dauphin, Poste Adm. Tsivory, Marotsiraka, III-60 Randriamasy, (MNHN) 2 m, 1 f; Madagascar, I.1956 C. KOCH leg.; Antanimora, Ambovombe Distr., (TM) 1 m, 2 f; Muséum Paris, coll. P. ARDOIN. 1978; V.1948, Vohitsara, Betsiboka, S. Tuléar, Madagascar, leg. F. PIERRE, (MNHN) 1 m, 1 f; Muséum Paris, Madagascar, Androy, Mandrare moy, Mt. Ihara Dr. J. DECORSE 1901,

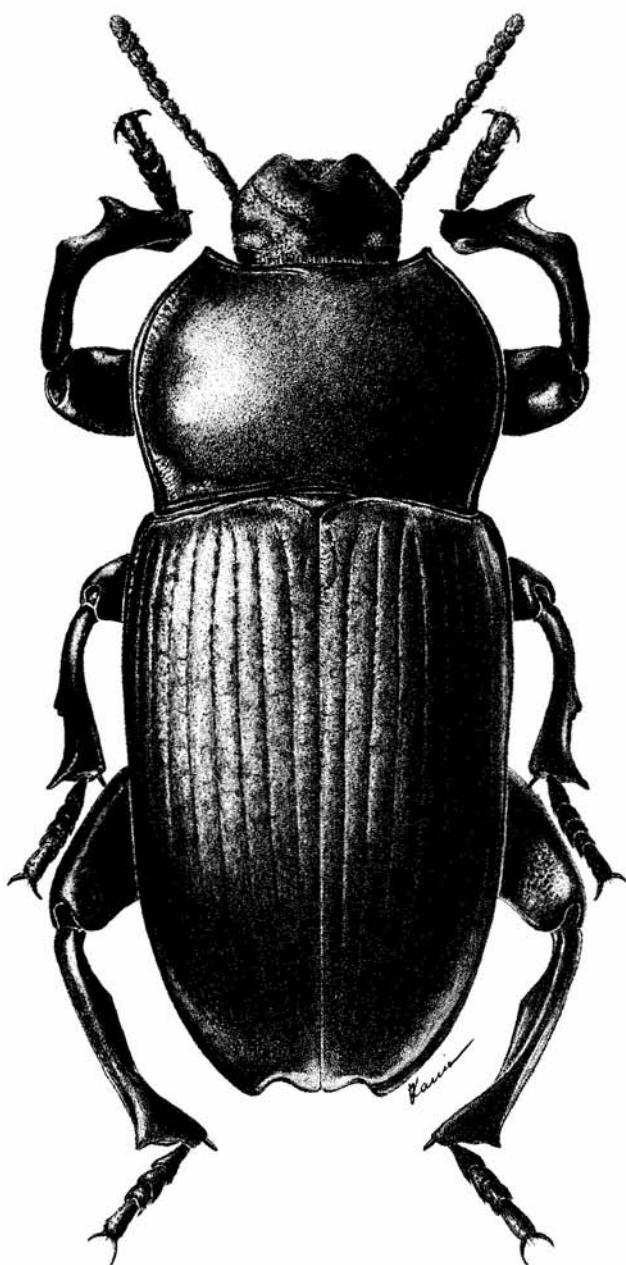


347. Distribution of *Styphacus kochi* (white circles), *S. bartolozzii* (black circles), *S. neuter* (white triangles) and *S. nimius* (black triangles)



348. *Pokryszkiella cornuta* (by J. KANIA)

349. *Melanocratus validipes* (by J. KANIA)



350. *Styphacus decorsei* (by J. KANIA)

(MNHN) 1 m, 1 f; 24 mai 1900; Muséum Paris, Madagascar, Androy Bas, Mandrare Riv., Orokotroky, Dr. J. DECORSE 1901, (MNHN) 1 m; 23 mai 1900; Muséum Paris, Madagascar, Androy Bas, Mandrare de Behara, a l'Orokotroky, Dr. J. DECORSE 1901, (MNHN) 1 m.

Styphacus kochi sp. nov.

Name derivation: in honour of an outstanding specialist of tenebrionid beetles, Dr Carlo KOCH.

Locus typicus: Itampolo (Madagascar).

DIAGNOSIS

S. kochi resembles species of the *neuter* group (*neuter*, *bartolozzii* and *nimius*) in the structure of elytra (convexity of anterior margin and gutter-like concave epipleura) and male mid tibiae and hind femora. It differs in the absence of bordering of anterior margin of elytra, shape of elytral process and structure of mentum and fore tibiae.

DESCRIPTION

Body length 13.0-16.0 mm, $pl/pb = 0.63-0.75$, elytra relatively short ($el/eb = 1.35-1.42$, $el/pl = 2.17-2.40$), $eb/pb = 1.11-1.14$. Body surface slightly shiny, pronotum with a greasy sheen; puncturation very delicate, poorly visible. Head distinctly punctate (fig. 330). Antennae moderately long (pl/al c. 1.27) and moderately thick (ab/al c. 0.08). Anterior margin of mentum almost straight; mid part of mentum wide anteriorly, in middle with an even longitudinal convexity (fig. 336). Anterior angles of pronotum straight, slightly rounded, posterior angles straight, not protruding outwards; along bordering a delicate, shallow gutter; sides rounded (fig. 328). Elytral humeral angles straight, slightly rounded (fig. 331). Sides of elytra nearly parallel, slightly narrowing towards the apex; punctures in rows very small; in the posterior part of elytra rows connected as in *S. decorsei*; intervals flat, practically not convex, puncturation poorly visible. Apex of male elytra as in figs 332, 333. Prosternal process somewhat protruding towards mesosternum (fig. 329), its bordering interrupted at apex (fig. 335). Mesosternum in middle with a shallow gutter; posterior margin slightly convex (fig. 334). Shiny, bare gutters on the underside of tarsi as in *S. neuter*. Male fore tibiae narrow, bent inwards (figs 337, 338); in females slightly widened towards apex, outer margin simple (figs 339, 340); male mid and hind tibia as in figs 341-344. Male hind femur with a denticle and concavity on the inner side (figs 345, 346). Apical part of aedeagus moderately long, $l.b.p./l.a.p.$ c. 1.94.

DISTRIBUTION (fig. 347)

SW Madagascar.

TYPES

Holotype (male); TM ; "Madagascar, I.1956 C. Koch leg.; Itampolo, Ampanihy Distr.".

Paratypes: Muséum Paris; Madagascar Sud, plateau Mahafaly, 11/12 km. Ouest d'Ankalirano, 250 m. 14/17-I-1974, P. VIETTE et A. PEYRIERAS, (MNHN) 5 m, 7 f; Madagascar, I. 1956 C. KOCH leg.; Itampolo, Ampanihy Distr., (TM) 2 f.

LIST OF GENERA AND SPECIES OF MELANOCRATOID *PLATYNOTINA*

Doyenus gen. nov.

D. uncus sp. nov.

D. dentatus sp. nov.

Hovademulus gen. nov.

H. ordinarius sp. nov.

H. punctipennis (FAIRMAIRE, 1902) comb. nov.

Selinus punctipennis FAIRMAIRE, 1902

H. tenuiculus sp. nov.

Hovademus ARDOIN, 1974

H. andringitrensis ARDOIN, 1974

H. pauliani ARDOIN, 1974

Madobalus FAIRMAIRE, 1901

M. rotundicollis FAIRMAIRE, 1901

Melanocratus FAIRAMAIRE, 1895

M. validipes FAIRMAIRE, 1895

= *Styphacus humerosus* FAIRMAIRE, 1901 syn. nov.

M. ferreri sp. nov.

M. fairmairei sp. nov.

Pokryszkiella gen. nov.

P. cornuta sp. nov.

Sebastianus gen. nov.

S. major (FAIRMAIRE, 1899) comb. nov.

Melanocratus major FAIRMAIRE, 1899

S. projectus sp. nov.

S. simplex sp. nov.

S. magnus sp. nov.

S. ovoideus (FAIRMAIRE, 1902) comb. nov.

Melanocratus ovoideus FAIRMAIRE, 1902

Styphacus FAIRMAIRE, 1901

S. decorsei FAIRMAIRE, 1901

= *Melanocratus amplicollis* FAIRMAIRE, 1902 **syn. nov.**

= *Melanocratus convexicollis* FAIRMAIRE, 1902 **syn. nov.**

S. phreneticus sp. nov.

S. neuter (FAIRMAIRE, 1902) comb. nov.

Melanocratus neuter FAIRMAIRE, 1902

S. kochi sp. nov.

S. nimius sp. nov.

S. bartolozzii sp. nov.

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