New data for Scydmaenus (Trapezoscydmaenus) from Madagascar with description of two new species (Coleoptera : Scydmaenidae)

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New data for *Scydmaenus (Trapezoscydmaenus)* from Madagascar with description of two new species (Coleoptera: Scydmaenidae).

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Two previously described species of *Scydmaenus (Trapezoscydmaenus)* from Madagascar are discussed and redescribed and two new Malagasy species, *S. (T.) bulirschi* **sp. n.** and *S. (T.) buchta* **sp. n.**, are described.

Deux espèces de *Scydmaenus (Trapezoscydmaenus)* de Madagascar sont discutées and redécrites, and deux nouvelles espèces malgaches, *S. (T.) bulirschi* **sp. n.** et *S. (T.) buchta* **sp. n.**, sont décrites.

Key words: Coleoptera, Staphylinidae, Scydmaenidae, Scydmaenus sbg. Trapezoscydmaenus, taxonomy, Madagascar.

INTRODUCTION

The name *Trapezoscydmaenus* was erected (Franz 1986: 368) to accommodate two outstanding species of *Scydmaenus*: *S.(T.) abnormis* and *S. (T.) balbini*, both captured in May 1969, on Madagascar, in only single female specimen, by Dr Herbert Franz himself. Neither the aedeagus nor the spermatheca of *Trapezoscydmaenus* were initially published.The subgeneric name *Trapezoscydmaenus* Franz was nevertheless fixed on *Scydmaenus (Eustemmus) cavipennis* Peyerimhoff (1949: 261) from West Morocco, designated by Franz as the type-species of the new subgenus.

A more recent material gave me an opportunity to reconsider the data published by Franz. Two other species, *S. (T.) buchta* sp. n. and *S. (T.) bulirschi* sp. n., resulting from recent fieldworks led on Madagascar are described here below.

MATERIALS AND METHODS

Abbreviations given for the Institution and collections:

NHMW - Naturhistorisches Museum, Wien, Austria
MHNG - Muséum d'Histoire naturelle, Genève, Switzerland
CSV - S. Vít Collection, Geneva, Switzerland

Abbreviations used in the descriptions (also in combinations):

co. -> combined (Length / Width etc.); L. -> length; W. -> width;

A. -> antennae. aS. -> apical segment of antennae; Cl. -> antennal 3-segmented club; E. -> elytra; Fl. -> flagellum (= antennal segments 3 - 8 combined); H. -> head; ms. -> meso; mt. -> meta; P. -> pronotum; Pd. -> pedicle Ti. -> tibia; Ta. -> tarsus.

Examples of combined use: H.W. => head width; co.L.H.P. => combined length of head and pronotum; co.W.E. => combined width of elytra; co.L.Fl.Pd. => combined length of flagellum and pedicle; etc.

The male genitalia and other dissected parts were mounted in Canada Balsam, on an acetate slide and pinned under the beetle mounting card.

For the measurements and ratios given in the descriptions a magnification of 160 x (Leitz) was used, but the characters mentioned in the key to species can be determined with a magnification of 50 x.

Scydmaenus (Eustemmus) cavipennis Peyerimhoff, the type-species of the sub-genus *Trapezoscydmaenus* could not be included in the study because of the present serious problems of material availibility inherent to the Paris Museum's collections.

TAXONOMY

Scydmaenus sbg. *Trapezoscydmaenus* Franz

Trapezoscydmaenus Franz, 1986: 366; type species *Scydmaenus cavipennis* Peyerimhoff

Tentative Diagnosis (based on Malagasy species). Body generally big, dorsally glabrous, head appearing proportionally small regarding the large size of the prothorax; colour of medium from rust-red to reddish-brown; elytra distinctly converging basally; metathoracic wings probably functional in both sexes.

Head seems be normally directed ventrally and not well exposed dorsally. Eyes moderately big, not protruding laterally, kidney-like shaped, composed of minute pigmented ommatidia; frons simply convex, projected between the antennal insertions; supra-antennal prominences none; antennal insertion hidden, coming posteriorly with a transverse cavity visible under the tegument in a liquid medium; mandibles characteristic for the genus *Scydmaenus* (Schmidt, 1988), falcate (♀), the left one provided with a simple, the right one with a bifidous and dorsally protruding retinaculum; penultimous segment of the maxillary palpy more or less strongly clavate, the apical one minute, acuminated or truncate, visible or masked by the downy setae.

Antennae slender, generally strongly elongate, three-segmented club well defined, segment 5 usually more strongly elongate, scapus always deeply excised apically, flattened or concave.

Prothorax bulky with unusually large dorsally (shape somewhat reminiscent to that of *Cephennium* or *Cyrtoscydmus*). Pronotum subtrapezoid or bulb-like; the base, free of foveae or a transverse groove can be very abruptly deflexed in its median third, where shaping a very deep transverse depression separating-it from the base of elytra, basal angles can be provided with a tightly packed patch of yellow-gold hairs, similar to those found frequently in different myrmecophilous coleoptera, or with a short cutting ridge (only in *balbini*).

Elytra with simple, unrimmed sutural edge; apices gently rounded, pygidium entirely exposed; elytral base simple, free of foveae, can exhibit (in male only ?) a deep and marked median depression and raised humera, projected ahead against the basal angles of the pronotum.

Venter. Mesosternum strongly reduced, forming laterally a large lobe overlapping externally the mesocoxae; sternal carina low on the mesosternum, finely grooved axially, tooth-like shaped apically on its junction with the metasternum

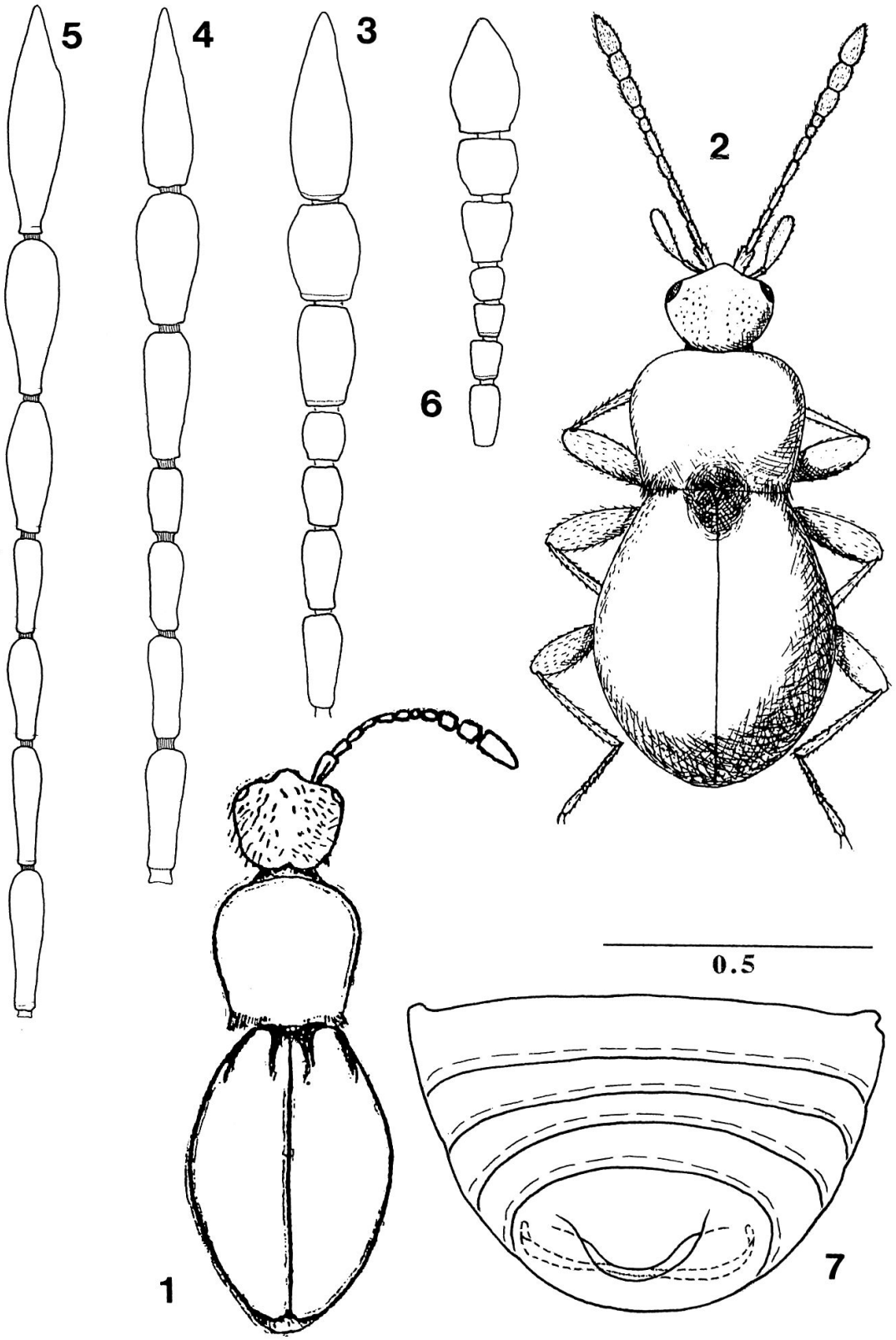


Fig. 1. *Scydmaenus (Trapezoscydmaenus) cavipennis* Peyerimhoff, habitus (according to Peyerimhoff); Figs 2 and 7. *Scydmaenus (Trapezoscydmaenus) abnormis* Franz: Fig. 2 - habitus (according to Franz), Fig. 7 - abdomen associated with the holotype; Figs 3 - 6. antennal segments 5 to 11 in *Trapezoscydmaenus* (sketched): Fig. 3 - *abnormis* Franz, Fig. 4 - *bulirschi* sp. n., Fig. 5 - *buchta* sp.n., Fig. 6 - *balbini* Franz.

(Fig. 10, 11); metepisterna generally well defined but at least subfused with the metasternum; metasternum free of marked median depression in male; metacoxal cavities strongly rapproched;

Legs simple, femora not clavate; protarsae of male only discreetly enlarged bud not densely setose ventrally; tibiae gently widened in the apical half, free of any marked secondary characters, lacking the distinct apical spurs.

Scydmaenus (Trapezoscydmaenus) cavipennis Peyerimhoff (Fig. 1).

Scydmaenus (Eustemmus) cavipennis Peyerimhoff (1949: 261).

I had not opportunity to examine Scydmaenus (Eustemmus) cavipennis Peyerimhoff from West Marocco (MNHNP), designated by Franz as the type-species of the subgenus Trapezoscydmaenus. Actually, following the original description and the figure given by Peyerimhoff (Fig. 1) and in spite of the marked zoogeographical discontinuity, S.(E.) cavipennis seems present at least several external characters exhibited also in the Malagacy species: the not geniculate antennae; subtrapezoid shape of the pronotum and the hairy vestiture of the hind angles of the pronotum; the strongly raised humera and the deep median depression of the elytral base (cf. Discussion).

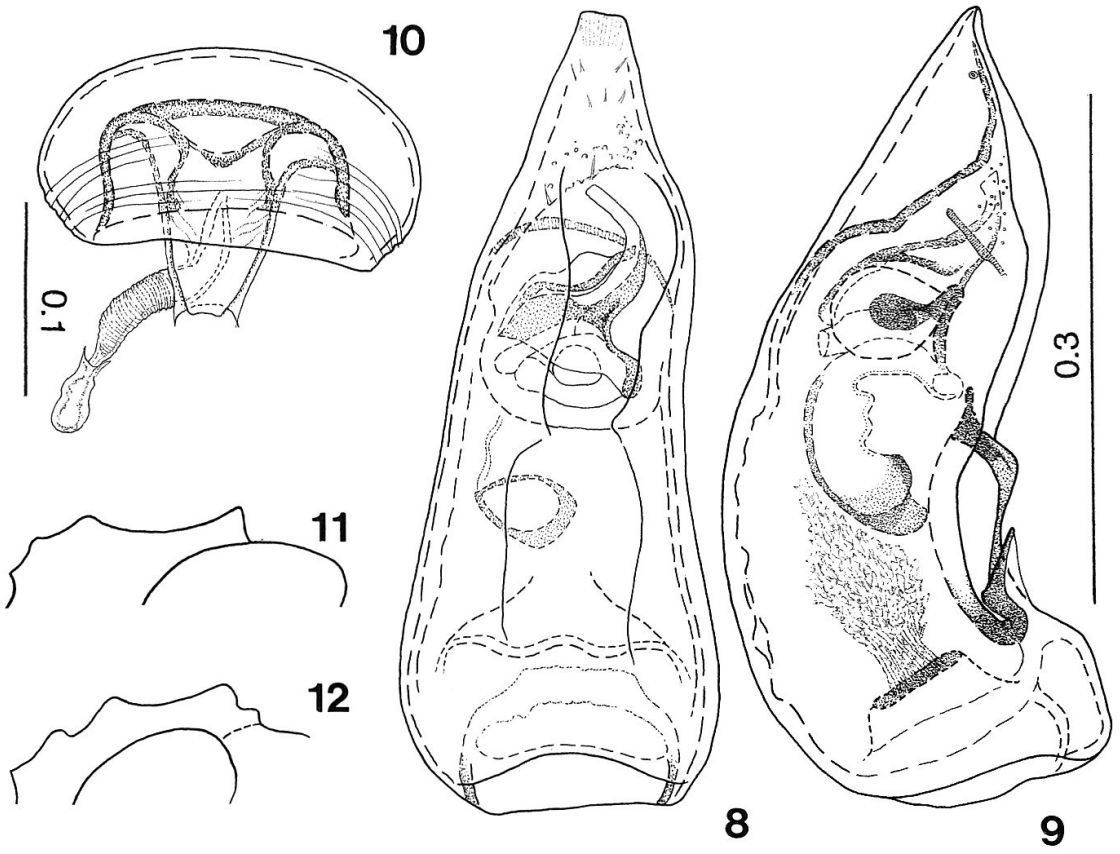
***Scydmaenus (Trapezoscydmaenus) bulirschi* sp. n. (Figs 4, 8, 9, 11)**

Diagnosis ♀. Big and distinctive species, body length 2. 52 mm, body width 1.09 mm, characterised by: filiform antennae free of any square segment, exhibiting slender antennal club; subtrapezoid pronotum with medially deeply deflexed base; medially deeply depressed base of elytra and sharply protuberant, setose humera; glabrous and shiny integuments; metathoracic wings developed in male.

Holotype: ♀ labelled /E-MADAGASCAR, 25.3.-3.4. 2001, Mt. Ambondrombe env. Δ 1579, P. Bulirsch lgt., 1500-1600 m.camp 6/; (CSV).

Description. Head half-round shaped, moderately convex, wider than long, (♀/ ratio (38/46) H.L./H.W.: 0.82; ratio (75/46)P.W./H.W.: 1.63), its maximum width found on the posterior limit of the eyes; vertex flattened; tempora broadly rounded towards the collar, about one and half longer than eyes; occiput simply convex; frons obtusely produced medially, then abruptly connected to the clypeus; apical edge of the labrum broadly and deeply excised in the middle, denticulate and longly ciliated laterally; penultimous segment of the maxillary palpy slightly longer than the scape, four times longer than wide, apical one well visible.

Antennae (Fig. 4) very slender, one and half longer than the head and pronotum combined (♀/ ratio (60/40)A.L./.co.L.H.P.: 1.5), and distinctly longer then the elytra combined width (♀/ ratio(60/42) A.L./.co.E.W: ♀/ 1.43); all antennal segments from distinctly to strongly elongate (the shortest ones being the pedicle and the segment 8, only twice as long as wide); segments of the flagellum unrimmed basally; segments 2 - 7 slightly clavate; 3-segmented antennal club well characterised, but distinctly shorter than the segments 3-8 combined (ratio (55/72)co.Cl./co.Fl.: 0.76); apical segment longly acuminated, at least three times longer than wide, but distinctly shorter than two penultimous segments combined; segment 5 nearly four times longer than wide; scape moderately clavate, deeply excised apically, flattened and concave on its outer side, three times as long as wide;



Figs 8 , 9, and 11. *Scydmaenus (Trapezoscydmaenus) bulirschi* sp.n.: Fig. 8 - aedeagus in tergal aspect, Fig. 9. idem in lateral aspect, Fig. 11 - sternal lamina (sketched); Fig. 10 - *Scydmaenus (Trapezoscydmaenus) buchta* sp. n., spermatheca; Fig. 12. *Scydmaenus (Trapezoscydmaenus) balbini* Franz, sternal lamina (sketched).

pedicle about twice as long as wide, a little stouter than the segments of the flagellum, shorter than the segment 4.

Pronotum subtrapezoid, convex, wider than long, its biggest width in its anterior third; (♀/ ratio (65/75)P.L./ P.W: 0.87); disc glabrous, bearing the very fine, scattered punctures; anterior angles boldly rounded; sides simple, edgefree, converging to the base, but bordered vento-laterally by a setose area; base very abruptly deflexed in its median third (in male only?), where shaping a very deep transverse depression separating-it from the elytral base; posterior angles masked under a dense vestiture of gold-yellow hairs directed backward.

Elytra fairly convex, their biggest width about the middle, then narrowing to the base, where less than the pronotal base (♀/ ratio (55/42)E.L./E.W.: 1.31; ratio (55/40) E.L./ co.L.H.P.: 1.38); dorsum glabrous, sides finely setose; base deeply and markedly depressed in the middle; humera raised, prominent, projected ahead against the hind angles of the pronotum and provided summitally with short, curly setae.

Venter pubescent. Prosternum short, concave, delimited laterally by a fairly raised sternoplural ridge; sternal lamina (Fig. 11) rudimentary on the mesosternum, reduced at two minute and suoblitered teeth then finely grooved medially and raised apically, shaping an acute tooth; metasternum strongly convex in male, barely one

and half broader than long, as long as five following sternites combined; metepisterna wide, subparallel, glabrous, keeping separated from the metasternum by a distinct, but fused suture; metatrochantera rather short, not clavate, twice longer than the median notched process separating the strongly rapproched metacoxal cavities.

Legs simple, femora not clavate; protarsae of male discreetly enlarged bud not densely setose ventrally; tibiae gently widened in the apical half, free of any marked secondary characters; metatibiae as long as the mesotibiae; metatarsi as long as the mesotarsi.

Aedeagus (Figs 8, 9) long about 0.45 mm, stout, not of the S-shaped type.

Biology: No data disponible

Distribution. South-East Madagascar, Anarantsoa Prov. E-Ambalavao.

Etymology. Named after Ing. Petr Bulirsch (Prague), the collector of the species.

***Scydmaenus (Trapezoscydmaenus) buchta* sp. n. (Figs 5, 10)**

Diagnosis ♂. Big and distinctive species, body length(87) 2.22 mm, body width(40) 1.02 mm; characterised by: filiform, apically very slightly expanded antennae combining only fairly elongate segments; subspherical pronotum free of basal depression, peer-like shaped elytra lacking the median basal depression; protruding humera; glabrous and shiny integuments, subasperate on elytra; metathoacic wings developed in female.

Holotype: ♂ labelled: /MADAGASCAR, Antsiranana Prov. (= Diego-Suarèz), 23.XI. 1989, Ambohitra (= Montagne. d'Ambre), 960-1000 m., leg B. Hauser; forêt primaire, sous les écorces et pierres/. (MHNG).

Description. Head half-round shaped, moderately convex (♂/ ratio P.W./H.W.: 1.55) (70x45), wider than long, (35x45) (ratio H.L./H.W.: 0.78), its maximum width found on the posterior limit of the eyes; eyes flattened; vertex somewhat flattened; tempora arched, one and half longer than the eyes; occiput simply convex; frons projected medially, then abruptly connected to the clypeus; apical edge of the labrum incised in the middle, denticulate and longly ciliated laterally; penultimous segment of maxillary palpy clavate, three times longer than wide, about as long as scapus.

Antennae (Fig.5) very slender, nearly twice longer (179) than the head and pronotum combined (96) (ratio A.L./.co.L.H.P.: ♂ /1,86), and much longer then the elytra combined width (110) (ratio A.L./.co.E.W: ♂/ 1.63); all antennal segments from distinctly to strongly elongate (the shortest one being the pedicle), segments (4) 5 to 11 discreetly rimmed basally; segments 2 - 8 ill-clavate; antennal club well characterised, slender and elongate but markedly shorter than the segments 3-8 combined (ratio coCl./co Fl.: 0.79); apical segment slender at least four times longer than wide, but shorter than two penultimous segments combined; segment 8 three times, segment 5 three and half times longer than wide; scape moderately clavate, deeply excised apically, three times as long as wide; pedicle shaped as the segments of the flagellum, reduced, about twice as long as wide, much shorter than the segment 4.

Pronotum "rape-like" shaped (70x57), convex, its biggest width about its anterior third; (ratio P.L./ P.W: ♂./ 0.81); dorsum glabrous, lacking punctures; anterior

angles oblitered; sides simply rounded, lacking any lateral ridge as well as the lateral row of setae; base finely rimmed; hind angles hidden under a dense vestiture of gold-yellow hairs directed backward.

Elytra (125x 110) fairly convex, their biggest width around the apical half than narrowing to the base, the last compressed laterally, giving to the elytra a peer-like shape; (ratio E.L./E.W.: ♂/ 1.14; ratio E.L./ co.L.H.P.: ♂/ 1.14); base simple, free of the foveae or median depression, as wide as the pronotal base; humera pronounced but not markedly raised, bold.

Venter pubescent. Prosternum short, concave, delimited laterally by an acute sternopleural ridge; mesosternum strongly reduced, mesepisterna forming laterally a large lobes overlapping externally the mesocoxae; sternal lamina concave distinctly carinate on the base of the mesosternum, finely grooved on the midline than raised apically into an apical obtuse tooth (as in bulirschi Fig. 11); metasternum strongly convex in female, one and half broader than long, longer than five following sternites combined; metepisterna wide, subparallel, mainly glabrous, keeping distinctly separated from the metasternum by a distinct, subfused suture; metatrochantera short, not clavate, as long as the median bifidous process separating the metacoxal cavities.

Legs simple, thin, elongate; protarsae of female non-enlarged, tibiae free of any marked secondary characters; metatibiae as long as (♂) the mesotibiae; metatarsi as long as the mesotarsi.

Aedeagus unknown. Spermatheca (Fig.10).

Biology. No data disponible, found in the primitive forest, probably under barks.

Distribution. Occurring in the Northern-end of the island (Nat. Pk. of Mt. Ambre).

Etymology. The specific epithet by combination of letters with no meaning.

Scydmaenus (Trapezoscydmaenus) balbini Franz (Figs 6, 12)

Scydmaenus (Trapezoscydmaenus) balbini Franz 1986: 368

Diagnosis ♂. Small species: body length 1.58 mm, body width 0.78 mm; well characterised by: short, stout antennae, pronotal sides provided basally with a short lateral ridge, and shiny, glabrous, but dorsally finely microreticulated integuments.

Material studied. Holotype: ♂ labelled /S-MADAGASCAR, Umg. Ft. Dauphin, lg. H. Franz 1969 + verso "Mg 44"/ /"Scièrie de Bémangidy/ /"*Scydmaenus (Trapezoscydm.) balbini* m."/ red label /"Typus"/, (NHMW).

Description. Head trapezoid, much smaller than the pronotum (♂/ ratio (52/33) P.W./H.W.: 1.57), convex, wider than long, (ratio (27/33) ♂/ H.L./H.W.: 0.82), its maximum width found on the posterior limit of the eyes; eyes not protruding laterally; tempora fairly long, slightly arched, about twice as long as the eyes, strongly convergent towards the collar; occiput simply convex; frons glabrous, free of short setae or distinct punctures, produced between the antennal insertions into an obtuse horizontal blade, shaped distally into a cutting edge, partly

disconnected from the clypeus; apical edge of the labrum longly ciliated, denticulate, not markedly incised in the middle; penultimous segment of the maxillary palpy strongly clavate, barely twice longer than wide, not as long as the scapus and pedicle combined, the last one downy.

Antennae stouter (85) (Fig. 6), slightly longer than the head and pronotum combined (ratio ♂ (85/80) A.L. /co.L.H.P.: 1.06, or as the elytra combined width (ratio (85/78) A.L./.co.E.W.: 1.1, not distinctly geniculate; segments of the flagellum unrimmed basally, slightly clavate, elongate (1-6), or subsquare (7-8); antennal club well characterised(31), shorter than the segments 3-8 combined(45), apical segment only one and half longer than wide, and just longer than two penultimous segments combined; segments 8 and 7 (♂) subsquare, at least slightly transverse; segment 5 more elongate, subequal to the pedicle; scape not markedly clavate, twice as long as wide, flattened and concave on its outer side; pedicle about twice as long as wide, shorter than the scape, longer than the segment 4 and subequal to segment 5.

Pronotum subtrapezoid, its biggest width on its anterior quarter, ratio (53/52) P.L./ P.W.: ♂ /1.0; dorsum shiny, glabrous, bearing the very subtle and scattered punctures; anterior angles boldly rounded; sides converging to the base, free of any setose structure, but provided laterally, in the basal fifth with a distinct, short lateral ridge ("scharfkantig" of Franz); base simple, very discreetly rimmed, free of the foveae or transverse groove,.

Elytra fairly convex, glabrous, the biggest width about their apical half than narrowing to the base where slightly wider than the pronotal base because of the gently marked humera; ratios (♂) (93/78) E.L./E.W.: 1.19; (93/77)E.L./ co.L.H.P.: 1.21; base free of foveae, base extremely discreetly depressed basally; scutellum hidden; sutura simple, unrimmed; apices subtruncate.

Venter pubescent. Prosternum short, flattened but convex in the middle, delimited laterally by a obtuse sternopleural ridge; mesosternum strongly reduced; mesepisterna forming laterally a large lobes overlapping externally the mesocoxae; sternal lamina (Fig. 12) raised basally, finely grooved on the midline, provided with two teeth of which the apical one is fairly acute than sloping to the metasternal junction; metasternum convex, one and half broader than long, as long as the five (♂) following sternites combined; metepisterna fused with the metasternum, sutures oblitered; metatrochanters not markedly elongate, clavate, about as long as the median process separating the metacoxal cavities.

Legs simple, thin, elongate; protarsae non-inlarged in female; tibiae free of any marked secondary characters; metatibiae slightly longer (♂) than the mesotibiae, ratio mtTi./msTi.: ♂/1.08.

Aedeagus unknown; spermatheca unknown.

Biology: No data disponible - captured in the sawmill of Bémangidy.

Distribution. South-East coast of Madagascar, about 100 km Northern from Taolanato (Ft. Dauphin)

Etymology. Named after Mr L. Balbine, chief of the mentioned sawmill.

Remarks. Th specimen could have been also introduced in the sawmill with wood of another origin.

Scydmaenus (Trapezoscydmaenus) abnormis Franz (Figs 2, 3, 7)

Scydmaenus (Trapezoscydmaenus) abnormis Franz 1986: 367

Diagnosis ♀?. Big and distinctive species: (93/45)body length 2.31 mm, body width 1.14 mm; well characterised by: filiform, apically moderately expanded antennae free of any transverse segment; pronotal base deeply depressed in the middle, hind angles provided with setose vestiture; elytral base deeply depressed medially, humerae protruding; glabrous and shiny integuments provided with only very fine, superficial and scattered punctures.

Materiel studied. Holotype: ♂ labelled /S-Madagascar, Col de Manangotry b. Ft. Dauphin, lg. Franz/ /♂/ /"*Scydmaenus (Trapezoscydmaen.) abnormis* m." det. H. Franz/ + red label /Typus/, (NHMW).

Description. Head roundened, convex, (♂/ ratio(78/51) P.W./H.W.: 1.53), wider than long, (ratio ((40/51) H.L./H.W.: 0.78), its maximum width found on the posterior limit of the eyes; eyes not protruding laterally; tempora rounded, long, about twice as long as the eye; occiput convex; frons between the antennal insertions produced into an acute process, connected very abruptly to the clypeus; apical edge of the labrum not markedly incised in the middle, ciliated; penultimous segment of the maxillary palpy moderately clavate, only as long as the scapus.

Antennae slender(55), longer than the head and pronotum combined (ratio (55/43) A.L./.co.L.H.P.: 1.28), and slightly longer then the elytra combined width (ratio (55/46 A.L./.co.E.W: 1.19); antennal segments from oblong (7, 8) to distinctly elongate, all distinctly unrimmed basally, segments of the flagellum slightly clavate; antennal club well characterised, shorter than the segments 3-8 combined, apical segment shortly acuminated, nearly three times longer than wide, and slightly shorter than two penultimous segments combined; scape clavate, elongate, twice as long as wide, flattened and concave on its outer side; pedicle rather short and subcylindrical, very markedly shorter than the scape, barely twice as long as wide; segment 5 more strongly elongate, one and half longer than the pedicle.

Pronotum subtrapezoid, rounded distally, moderately convex dorsally, its biggest widths in its anterior third; (ratio 65/78)P.L./ P.W: 0.83); dorsum shiny, bearing a very fine, scattered punctures; anterior angles boldly rounded; sides simple (and not "scharfkantig" of Franz), converging to the base, partly setose laterally, bordered vento-laterally by a row of short setae; base free of distinct foveae or a transverse groove, very discreetly rimmed, basal edge very abruptly deflexed in its median third, forming a very deep transverse depression separating-it from the base of elytra; hind angles hidden under a dense vestiture of gold-yellow hairs directed backward;

Elytra fairly convex, their biggest width about the middle, then narrowing to the base where not as wide as the pronotal base; (ratio 55(/46) E.L./E.W.: 1.19; ratio (55/43) E.L./ co.L.H.P.: 1.28); dorsum glabrous, sides very finely setose until the sutural apices; base deeply and markedly depressed in the middle; humera prominent, projected against the hind angles of the pronotum; scutellum minute, exposed; sutural edge unrimmed; apices gently rounded.

Venter pubescent. Prosternum short, concave but discreetly convex in the middle, delimited laterally by a obtuse sternopleural ridge; mesosternum strongly reduced; mesepisterna forming laterally a large lobe overlapping externally the mesocoxae; sternal lamina ill-raised basally, reduced at a low and suoblitered tooth masked under the coxae, than produced apically in a fairly acute tooth (as in bulirschi Fig. 11); metasternum strongly convex, one and half broader than long, as

long as the five following sternites combined; metepisterna wide, subparallel, partly glabrous, keeping distinctly separated from the metasternum by a distinct, subfused suture; metatrochanters rather short, moderately clavate, twice longer than the median process separating the strongly rapproched metacoxal cavities.

Legs simple, femora not clavate; protarsae discreetly thickened, more densely setose ventrally; tibiae gently widened in the apical half, free of any marked secondary characters; metatibiae slightly shorter than the mesotibiae (ratio mtTi./msTi.: 0, 9).

Aedeagus unknown; spermatheca unknown. (see Remarks)

Biology: No data disponible - in the litter of the tree covered slopes of low altitudes (630 m., "Laubstreu des Gebirgewaldes").

Distribution. South-South-East of Madagascar, low hills (630 m.) Northern from Taolanato (= Ft. Dauphin).

Etymology. the specific epithet used by H. Franz makes allusion to the size of the species.

Remarks. The specimen was described as a female but the structure of the sternites (Fig. 7) of the originally detached abdomen associated with the holotype and the scattered adhesive setose vestiture of the pro- and mesotarsae (non enlarged in male!) indicate a male specimen of which the aedeagus was simply lost during the dissection.

DISCUSSION

The initial purpose of this paper was a revision of the subgenus *Trapezoscydmaenus* Franz. Unfortunately, because of the present/contemporary serious problems assuming/striking the Paris Museum's collections, the type-species of the subgenus *Trapezoscydmaenus* Franz, i.e. *Scydmaenus (Eustemmus) cavipennis* Peyerimhoff, could not been studied.

The unique specimen of *S.(Eustemmus) cavipennis* Peyerimhoff (1949: 261) comes from West Morocco (Atlantic coast) and was described as a female and its habitus was, but the aedeagus could not be illustrated. Actually, following the original statement, *S. cavipennis* exhibits, at least dorsally, several important characters incountred also in the Malagasy species: the not geniculate antennae; subtrapezoid shape of the pronotum and a hairy coat of the hind angles of the pronotum; the strongly raised humera and the deep median depression of the elytral base. On the other hand nothing is known about the ventral characters, copulatory organs and secondary sexual characters, and the marked zoogeographical discontinuity keeps also questionable. Franz, himself, doesn't mention to have seen the Peyerimhoff's original material and the Malagasy species *S.(T.) balbini* has been included in the subgenus with some reserves (Franz 1986: 368).

Regarding the diagnostic characters of the subgenus, two Malagasy species, *S. (T.) balbini* Franz and *S. (T.) buchta* sp. n., known by females, exhibit neither the basal deflection of the pronotum, nor the deep basal depression of elytra and the strongly protruding humera, while the attested male of *S. (T.) bulirschi* sp. n. and here supposed male of *S. (T.) abnormis* Franz do. This brings me to conclude that at least these characters could be only the secondary sexual characters.

In that case, the Peyerimhoff's specimen would be probably a male and its study is highly needed. The only known aedeagus, that of *bulirschi* sp. n. is shaped

very differently of that found in the subgenus *Eustemmus*, which spreads in all North African area.

KEY TO SPECIES OF *TRAPEZOSCYDMAENUS* FRANZ

1 Base of the elytra normally shaped, not deeply depressed in the middle (♂).2
- Base of the elytra deeply depressed in the middle (♀ and ?♂).....3
2 Body length under 1.7 mm, body width 0.78 mm; pronotum subtrapezoid, sides converging to the base, hind angles free of setose vestiture, provided with short but distinct lateral ridge; antennae stout, ratio A.L./co.L.H.P.: 1.06, segments 7 and 8 about as long as wide; elytra finely microreticulated. SSE of Madagascar .....*balbini* Franz
- Body length over 2 mm; pronotum bulbous, sides rounded hind angles free of lateral ridge, masked under a dense vestiture of yellowish setae; antennae markedly elongate, ratio A.L./co.L.H.P.: 1.86, free of transverse segments; elytra with oblitered puncturing, ratio E.L./E.W.: ♂/ 1.14;. North of Madagascar ..... *buchta* sp.n.
3 Antennae not strongly elongate, probably shorter than the head and pronotum combined, segment 7 reduced in size, tentative ratio E.L./E.W: 1.44. W-Marocco ..... *cavipennis* Peyerimhoff
- Antennae markedly elongate, slender, free of any distinctly square segment 4
4 Antennae slender, elongate, segments subcylindrical, more or less strongly elongate exception made for the subsquare segment 8, ratio A.L./co.L.H.P.: 1.28. Body length 2.3 mm, width 1.14 mm; ratio E.L./E.W.: 1.22. East-South of Madagascar ..... *abnormis* Franz
- Antennae filiformous, all segments distinctly elongate, gently clavate and pedonculate basally, ratio A.L./co.L.H.P.: 1.55;sides of the pronotum obtusely rounded. Body length 2.55 mm, body width 1.09 mm; male ratio E.L./E.W.: 1.19. E-Madagascar ..... *bulirschi* sp. n.

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