A few new African species of Endomychid Coleoptera

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The number of species of this family at present recorded from Africa is small compared with those known from the other principal regions. Of 651 species recorded in Csiki's Catalogue of 1910 only 50 from Africa are included and of these several names are redundant. This is less than the number listed for Europe and very much fewer than those of Asia, North or South America. Half the catalogued African species belong to the two genera *Trycherus* and *Danäe*. The latter is the predominant African genus and will certainly be found ultimately to include a considerable number of African forms.

To the African genera in the catalogue two more were added by me in 1920, *Mimolithophilus* and *Lycoperdinodes* (= *Lycoperdinella*], a third, *Microtrycherus*, by M. PIC in 1937, while two others, previously only known from the East, *Saula* and *Ectomychus*, have been recorded as African by Mr STROHECKER in *Psyche*, vol. 51, 1944.

The species described here are contained in the British Museum collection and a few of them are also in the Musée du Congo Belge, Tervuren, Belgium.

Of the twenty species ascribed to the genus Lycoperdina in the catalogue nearly all are palaearctic. Lycoperdina glabrata WALKER does not belong to the Endomychidae but to the Tenebrionid genus Leiochrota. Two Madagascan and one South African species however are included in Lycoperdina and three more African representatives are added here. The four African forms (excluding the Algerian L. penicillata MARS.) differ from the typical species of the genus in having a clothing of fine hair upon the body and legs. They may be distinguished as follows —

Elytra widest before the middle; antennae nearly half as long as the body.

Hind angles of the thorax produced.

Thorax moderately long; antennal club narrow, sericea GERST. Thorax short; antennal club broad, clavala, n. sp.

Hind angles of the thorax not produced, angusta n. sp. Elytra not widest before the middle; antennae not nearly half as long as the body, nuts n. sp.

Lycoperdina clavata n. sp.

Testaceous, with the exception of the black antennal club and the eyes, entirely and moderately closely clothed above and beneath with short pale hair.

Elongate, not very convex, with the legs and antennae slender. Upper surface finely and rather closely punctured, the head between the eyes convex and almost as wide as their combined diameters; the pronotum short, strongly transverse, broad in front, with rounded lateral margins, narrowed behind, with the angles acutely produced, lateral foveae parallel, deep, extending a little beyond the middle, the base almost straight; scutellum semicircular; elytra moderately long, finely and closely punctured, with the sides nearly parallel to beyond the middle and gradually contracted from there to the tips. Legs long and slender, the hind femora not distinctly clavate, the tibiae not dilated at the end. Antennae long, segment 3 twice as long as 4, the last two closely connate, large and transverse, the terminal one subquadrate.

Length 4 mm.

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Uganda : Mabira Forest (C. C. GOWDEY, June 1913).

A single specimen. It is quite possible that, like many specimens of this genus when taken, the full mature colouring has not been attained. It is a little larger than L. sericea, with a shorter pronotum and longer elytra, which are more gradually attenuated behind. The head and pronotum are more finely punctured and the eyes farther apart. The last four or five antennal segments are black and the last two much larger than usual in the genus Lycoperdina and so closely applied together that, although the ninth is larger than those preceding it, the club appears to be composed of two only.

Lycoperdina angusta n. sp.

Dark reddish-brown, with the legs and antennae pale and the elytra black, sometimes a little tinged with red at the base and apex, the whole body above and beneath, including the legs and antennae, uniformly and rather closely clothed with short pale decumbent hair.

Elongate, rather narrow, uniformly and not very finely punctured, except upon the abdomen. Head convex between the eyes, whose diameter is equal to half the interval separating them; pronotum a little wider than its length, with the lateral margins feebly rounded in front, straight and convergent behind, the front angles slightly acute and the hind angles right angles, the lateral sulci very deep, nearly parallel, extending beyond the middle, the base almost straight; elytra long, very convex, not much wider than the pronotum, tapering behind, the shoulders not very prominent, the sides gently curved. Metasternum not quite as long as the first ventral sternite, which is as long as the three following, the fifth scarcely shorter. Legs long, the middle and hind femora clavate, the tibiae straight. Antennae very slender, not thickened at the end, with segments 1, 2 and 3 elongate, 9 and 10 transverse and the last one acuminate.

Length 3-4 mm.

Cape Province: Somerset East (R. E. TURNER, Oct.).

The term Cape of Good Hope, cited by GERSTAECKER as the habitat of L. sericea GERST., must no doubt be interpreted in the very wide sense in which it was commonly used at the time, for the description certainly does not apply to the present species. I believe the name to belong to a broader species with the coloration described, which is found in Natal. The new species, which was taken in some abundance, is nearly related but of peculiarly narrow shape, with the elytra little wider than the thorax and in general uniformly dark, not decorated with a dark oval patch as in the Natal species. The middle and hind legs are rather more slender than those of L. sericea.

Lycoperdina mus n. sp.

Body, legs and antennae bright yellow, with the head and the median part of the pronotum reddish-yellow and the inner half of each elytron black or reddish-black, the whole rather closely clothed with fine pale hair.

Moderately elongate, convex, with stout legs and not very long antennae, the latter with segment 1 clavate, 2 slightly elongate, 3 twice as long as wide and as long as 4 and 5 together, 6, 7 and 8 almost spherical, 9 a little wider, forming, with the very little enlarged 10th and 11th, a small, not well-defined club. Head closely punctured, the interval between the eyes equal to their combined width; pronotum short and broad, moderately finely and closely punctured, with the sides gently curved in front, contracted and almost straight behind, the angles sharp but not produced, the lateral sulci narrow, slightly converging to the base and extending to the middle; elytra rather more finely and closely punctured than the pronotum, moderately convex, without prominent shoulders, not tapering behind, the sides being regularly rounded and the greatest width not before the middle. The legs are fairly stout, not slender.

Length 3-3'5 mm.

Orange River Colony: Smithfield (KANNEMEVER).

Two specimens were taken, one with a broad black sutural stripe and the other without it. This little species has a rather thicker hairy covering than the other African forms and the upper surface is in consequence entirely dull. The elytra are more uniformly rounded at the sides than in the allied species and the antennae are distinctly less long and slender. As in other species of *Lycoperdina* the dark elytral area is liable to be absent.

Mycetina aequatorialis n. sp.

Body and legs pale testaceous, with the inner part of each elytron brown and the antennae black, except the three or four basal segments and part or the whole of the last, which are pale.

Broadly oval, very smooth and shining, except upon the lower surface, head, antennae and legs, which are clothed with very fine pale hair. Antennae very slender, the last four segments slightly broader than the rest but only the penultimate one distinctly transverse, the last elongate-oval. Head finely pubescent, the eyes large and finely facetted, the diameter equal to about one-third of the interval between them; pronotum broadly transverse, almost unpunctured, the sides straight and parallel except

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near the rounded front angles, where they are gently curved, the hind angles rectangular, base deeply sulcate, lateral foveae shortly triangular; elytra very convex, finely and sparsely punctured, with narrow lateral margins.

Uganda: Buamba Forest, Semliki Forest, 2300-2800 ft. (Dr S. A. NEAVE, Nov.).

Belgian Congo: Boende (Equator, R. P. HULSTAERT).

The type is in the British Museum and a co-type in the Belgian Congo Museum, Tervueren.

In the very slender antennae and the small basal foveae of the pronotum this species resembles *Mycetina Gedyei* ARROW, but it is not in other respects very similar, being feebly punctured and much more glossy, pale but not so brightly coloured, with larger eyes and narrower margins to the elytra. From *Mycetina africana* GORH. it differs in the non-prolongation of the thoracic foveae.

The punctures of the elytra are a little finer in the Congo Museum specimen than in the type.

Mycetina Evansi n. sp.

Reddish-testaceous, with the legs and the sides of the pronotum paler, the antennae black, with the first two segments and the extremity of the last pale.

Broadly oval, smooth and shining, with slender legs and the antennae slender at the base and dilating gradually from the 6th segment, the last five being transverse and forming a long closely articulated club. Head finely pubescent, the eyes moderately large, the diameter equal to one-third of the interval between them, pronotum very smooth, almost unpunctured, the sides straight and parallel behind, gently curved towards the blunt front angles, the hind angles slightly acute, the base deeply sulcate and the lateral foveae broad and deep; elytra finely punctured, with narrow lateral margins.

Length 4 mm.

Belgian Congo: Elizabethville (H. S. EVANS).

N. W. Rhodesia: Congo - Zambesi Watershed (H. S. EVANS). One specimen was found on each side of the frontier.

In the shape, coloration, glossy upper surface and most of its other features this species closely resembles M. aequatorialis but

it is a little larger and differs conspicuously in its stout antennae, of which only the 1st, 3rd, 4th and 5th segments are elongate, while the last five are broad and closely compacted. They are similar to but longer than those of M. africana GORH., of which the coloration also is similar, but the thoracic foveae of M. Evansi, like those of M. aequatorialis, are much shorter.

Stenotarsus luluensis n. sp.

Reddish-testaceous or reddish-brown, the legs and antennae yellow, with the club of the latter black, the body rather closely clothed above and beneath with moderately short, not very closelying yellowish hair.

Oblong, narrow, the upper surface closely and deeply punctured, the sides of the pronotum more closely, head finely and closely punctured, the eyes small and far apart; pronotum more strongly and deeply punctured, the raised lateral margin not very wide but strongly inclined, the inner edge sharply elevated, outer edges straight and parallel behind, gently curved in front, the front angles blunt and hind angles rectangular, the basal foveae deep and narrow, one-third the length of the pronotum, the base gently tri-sinuate and very narrowly margined at the sides, scutellum transverse and rounded; punctures of the elytra moderately fine internally, stronger and closer externally, without trace of serial arrangement, the sides almost parallel in front, gently rounded behind. Antennae slender, 3rd segment rather long, 4 and 5 slightly elongate, 6, 7 and 8 short, the last three large, 10 transverse and 11 shortly oval.

Length 3'5 mm.

Belgian Congo: Lulua, Kapanga (F. G. OVERLAET, Aug.), Kibati, Kivu (Dr H. SCHOUTEDEN, Nov.).

The type is in the Congo Museum, Tervuren, and the co-type in the British Museum.

This little species appears to resemble *S. Pauli* Weise but differs from it by the legs and the footstalk of the antennae being pale instead of black. The rather narrow, not horizontal but strongly inclined side margins of the thorax seem to be very distinctive.

African representatives of this very large genus appear to be few although they are fairly numerous in Madagascar. The abundant and widely distributed *Stenotarsus guineensis* GERST.

has received several names, *ovatus* GORH. being one of them. The type in the British Museum is a defective and badly abraded specimen.

Genus Danae Reiche

Chapuis, in volume 12 of the Genera des Coléoptères, states that the enlargement of the oth segment of the antenna is not peculiar to the male sex but this is incorrect. He apparently knew only the male and the difference in the ventral segments described by him as sexual is therefore also incorrect. WEISE (Deutsche Ent. Zeits., 1903, p. 199) has expressed the opinion that Oediarthrus GERST. is not, as supposed, a simple synonym of Danae but can be distinguished by the shape of the enlarged oth antennal segment. Comparison of a considerable number of species gives no support to his suggestion that these can be separated into two groups according to the form of this peculiar organ and I do not consider that GERSTAECKER's name can be usefully retained. The relative size of the joint varies greatly in different species and I have found no satisfactory means of separating generically a few in which there is no enlargement nor apparent difference between the two sexes, the Japanese Coniopoda orientalis GORH. being one of these. Another appears to be the abundant East African Danae abdominalis WEISE. The type of this is said to be a female, on account, no doubt, of the absence of a swollen joint, but I believe both sexes to be alike.

Danae nigricornis n. sp.

Bright yellow, with the antennae entirely black (the basal segment alone sometimes very dark red) and the legs pale, the whole rather closely clothed with pale hair.

Moderately broad and compact, finely and not very closely punctured, shining, the antennae moderately long, segment 3 elongate, 4-8 spherical, 11 elongate-oval. Pronotum rather broad, the sides almost straight and parallel behind, gently rounded in front, the front angles little produced, blunt, the hind angles sharp, the raised lateral margins not very broad nor very narrow, the basal margin broad, basal foveae small, not produced, scutellum rounded and transverse; elytra very convex: \circ . 9th antennal segment swollen, pear-shaped, deeply excavated beneath, lobed

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anteriorly at its distal end.

Length 3'5 mm.

Nyasaland : Mlange (S. A. NEAVE, Nov.).

Belgian Congo: Lukuga Basin (H. DE SAEGER), Kwamouth (Dr H. SCHOUTEDEN, June).

Type in the British Museum, co-types in the Congo Museum, Tervuren. The wholly black antennae (the basal segment alone sometimes excepted), contrasted with the bright yellow body and pale legs, will enable *D. nigricornis* to be recognised without difficulty. The basal margin of the pronotum is rather wide, the basal groove almost straight and the hind angles are acute. In the male the 9th segment of the antenna is largely hollowed beneath, narrow at the base and broadly produced in front.

Danae ovata n. sp.

Bright yellow, including the legs and antennae, except the three or four terminal segments of the latter, which are black, the whole rather closely clothed with fine pale hair.

Regularly oval or broadly oblong-oval, very compact and convex, with the legs not very slender, the middle and hind tibiae a little curved, especially in the male, the antennae slender, segment 3 feebly elongate, 4-8 subequal, 11 shortly oval; pronotum closely punctured, with the sides straight and parallel behind, gently curved in front, the front angles blunt and hind angles subacute, the raised margins moderately broad, narrowing in front, base deeply grooved, basal foveae small; elytra rather parallel-sided, finely and closely punctured:

♂, 9th antennal segment swollen and bell-shaped, 10th very short and transverse; middle and hind tibiae rather strongly curved.

Length 3 mm.

N. W. Rhodesia: Kashitu, North of Broken Hill (H. C. DOLL-MAN, July).

This is a small species with comparatively short legs and antennae and regularly oval shape. The pronotum is of the same width as the elytra at the shoulders, to which it is exactly applied, producing a continuous outline. The puncturation of the upper surface is rather close, especially upon the pronotum. The middle and hind tibiae are curved, as in *D. curvipes* and *natalensis* (the latter also taken in both Northern and Southern Rhodesia) but the curvature is only slight in the female. A male in which the enlargement of the 9th antennal segment is less than usual has also only slightly curved tibiae.

Danae Turneri n. sp.

Red or yellowish-red, with the legs pale and the antennae black, with the three, four or five basal segments pale, entirely clothed with very fine pale hair but moderately shining.

Rather long-bodied, convex, with fairly slender antennae; pronotum finely but distinctly punctured, with the sides rounded in front, almost straight and parallel, behind, the front angles blunt and hind angles sharp, the basal margin broad and smooth, the basal foveae large, deep and recurved at the outer end around a projecting lobe; elytra finely punctured; legs not long, the tibiae almost straight:

of, 9th segment of the antenna enlarged, bell-shaped, a little excavated beneath, about as long as wide, 10th very short and transverse, the last obliquely oval.

Length 3 mm.

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South Africa, Pondoland: Port St. John (R. E. TURNER, August).

Natal: Frere (Sir G. A. K. MARSHALL, March).

This species resembles *D. natalensis* GERST. but is rather less elongate, with more convex elytra and the middle and hind tibiae of the male not distinctly curved. The basal groove of the pronotum is deeper and the lateral foveae are not directed forwards at the end but return towards the base, a little projecting lobe from which screens the orifice. The antennae are fairly slender but the last segment is only feebly elongate. In *D. pulchella* GESTRO, which also nearly resembles this species, they are longer and the 9th segment in the male is more globular and not bellshaped. The basal groove of the pronotum is nearer to the hinder edge and does not reach so near to the lateral margin.

Mycetaea ciliata n. sp.

Reddish-testaceous, with the antennae and legs pale yellow; elongate, very convex, rather coarsely punctured above and Bull. et Ann. Soc. Entom. de Belgique, 84, I-II, 1948.

clothed, not very closely, with pale hairs, directed backwards and interspersed upon the elytra with long, fine bristles perpendicular to the surface and at right angles to the outer edges.

Eyes very small and prominent, each consisting of about a dozen convex facets, antennae slender, with segments 1-7 elongate, 8 spherical, 9-11 forming a loosely-articulated club, 11 acuminate at the tip; pronotum strongly and deeply punctured, the sides rounded in front and straight behind, the front angles very blunt and hind angles moderately sharp, the raised lateral margins very broad in front and a little narrowed behind, the base trisinuate, narrowly margined by a deep groove, scutellum very short and broad, rounded behind; elytra very convex, strongly rounded in front and attenuated behind, bearing large punctures in longitudinal series, the outer margins a little flattened.

Length 2 mm.

Eastern Cape Province: Hogsback, 4000 ft. (R. E. TURNER, October).

A single specimen in the British Museum.

In addition to the common European Mycetaea hirta MARSH., one species of this genus from South Africa, M. ovulum WOL-LASTON, represented by the unique type-specimen in the Oxford University Museum, has been described. This second South African species more nearly resembles the European species than does M. ovulum, being almost identical in shape and general appearance with M. hirta, although rather larger and relatively longer. The hairy clothing also is similar but the puncturation of the upper surface is stronger and a well-marked difference is seen in the long and very fine stiff bristles which project from the elytra and especially from their outer edges and are about as long as half the width of an elytron at the widest part. The pronotum has the same shape as that of M. hirta and is not narrow, as in M. ovulum, but the punctures are stronger and the raised lateral margins much wider. The base is finely margined but without the deep groove at a little distance from the posterior edge seen in M. hirta. The antennae are longer and the eyes smaller and composed of very few facets.

The undoubtedly close relationship between these geographically widely separated insects is of much interest and, although it would no doubt be permissible to establish a new genus, I consider it better not to do so, at least until the discovery of further

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examples enables the two African species to be more adequately studied.

A single minute Australian beetle acquired by the British Museum with the late Canon Blackburn's types was labelled by him « *Mycetaea pilosella* BLACKB., type. » I have been unable to find any description of this. It is not a *Mycetaea* and probably not an Endomychid.

I take this opportunity of recording the fact that the Australian *Eleothreptus punctulatus*, described by BLACKBURN in 1895 as belonging to a new genus of Endomychidae and of which the type is now in the British Museum collection, does not belong to this family but to the Discolomid genus *Aphanocephalus*.

Contribution à l'étude des arthropodes nidicoles et microcavernicoles de Belgique

par N. LELEUP

Rectifications

Nous prions les lecteurs de vouloir bien apporter les rectifications suivantes au texte publié dans les *Bulletin et Annales*, tome 83, fascicules XI-XII :

- p. 316, ligne 1: au lieu de « Cryptophagus signatus STRM. », lire Cryptophagus saginatus STRM.
- -- p. 320: Gnathoncus nidicola Joy, mettre le signe + dans la 4º colonne (vergers).

Supprimer le signe + dans la 4° colonne, entre Gnathoncus rotundatus KUG. et Plegaderus discisus ER.

Alphitophagus bifasciatus SAV, remplacer le signe — par le signe +, dans la 4° colonne.

Pentaphyllus testaceus HELLW., remplacer le signe + par le signe -, dans la 4^e colonne.

-- p. 323, ligne 12: au lieu de « humifère », lire « humicole ».

- p. 329, n° 58, ligne 2, au lieu de « Scydménide », lire « Psélaphide ».

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