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Annals and Magazine of Natural History: Series 7

Publication details, including instructions
for authors and subscription information:
<http://www.tandfonline.com/loi/tnah13>

III.—New Eastern, Australian, and African Heterocera

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Published online: 29 Sep 2009.

To cite this article: Colonel C. Swinhoe M.A. F.L.S. (1907) III.—New Eastern, Australian, and African Heterocera , Annals and Magazine of Natural History: Series 7, 19:109, 49-56, DOI: [10.1080/00222930709487228](https://doi.org/10.1080/00222930709487228)

To link to this article: <http://dx.doi.org/10.1080/00222930709487228>

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reflected, densely punctate; anteriorly the punctures are irregular, producing a reticulate appearance; a few irregular smooth spaces on all the thoracic tergites; thorax beneath black, shining. Abdomen with large shallow punctures above; lateral margins of fifth and sixth segments slightly sinuate, four or five punctures in the sulci of third to sixth segments; supra-anal lamina quadrate, slightly concave, angles rounded; abdomen beneath æneous, densely punctate, lateral smooth stigmata on each segment; subgenital lamina ample, sinuate, striato-punctate. Cerci rufous. Coxæ, apices of femora, tibiæ, and tarsi rufo-testaceous; femora castaneous.

Total length 23 mm.; pronotum 7·8 mm. × 14 mm.

Tuyen-Quan, Central Tonkin (*A. Weiss*, 1901); a long series of specimens in all stages of growth (Paris Museum).

This is one of the most brilliantly-coloured cockroaches known to science; its colour is reminiscent of the gorgeous metallic-green Cetoniid beetles of the Eastern Tropics.

III.—*New Eastern, Australian, and African Heterocera*.

By Colonel C. SWINHOE, M.A., F.L.S., &c.

Family Bombycidaæ.

Andraca apodecta, nov.

♂ ♀. Of a uniform ochreous-fawn colour, the male slightly suffused with brownish and darker than the females; shafts of the antennæ dark brown above, white at the sides, pectinations of the male brown; some whitish suffusion along the outer portions of the costa in the male, not present in the females: fore wings with three transverse indistinct grey lines or thin bands—antemedial, medial, and discal, the two former sinuous, the latter deeply angled outwardly below the costa: hind wings with two medial lines and with the ground-colour of the wings paling towards the costa: the hairs on the abdominal margin dark brown, this margin curved inwards but without any excision. Underside paler, lines as above.

Expanse of wings, ♂ $1\frac{8}{10}$, ♀ $2\frac{4}{10}$ inches.

Padang, W. Sumatra; one male, two females.

The fore wings are not so produced as in the type species of the genus, *bipunctata*, Walker, from India, and it is without the excision of the abdominal margin of the hind wing as in that species, but it has every other character of the genus.

Family Aganiidæ.

Asota philippinensis, nov.

♂. Palpi black, first and second joints with white stripes; frons white, with a black central spot; head and body deep chrome-yellow; a black spot at the base of each antenna; a black and white collar, a black thin band behind it; a black spot on each shoulder, another on the thorax near the base of the abdomen, a black stripe on the thorax at the base of the fore wings, black dorsal spots on the first five segments of the abdomen, and a double row on each segment below: fore wings dark purplish grey, as in *A. paphos*, with a deep chrome-yellow subbasal patch, which does not touch the costa, which is there black intersected by white, making four square marks; the immediate base is white, with a black spot, followed by another on the inner edge of the chrome patch; an elongated spot on the lower side of the patch, an angled spot on the middle of the outer side and a round spot above it; veins whitish, most prominently on the outer portions of the wing: hind wings black, whitish above the cell; some whitish longitudinal short streaks in the disk; a long streak in the abdominal marginal space and an outwardly recurved whitish discal line or thin band, which ends near the extremity of the long streak. On the underside the wings are slaty grey for two thirds, slaty black with whitish veins on the outer third; a large patch or spot at the end of each cell; a small spot near the base on the fore wings and one in the middle of the cell on the hind wings; the veins are marked with slaty black on both wings; the discal recurved band is clear on the hind wings, and indications of a somewhat similar band on the fore wings; cilia white above and below.

Expanse of wings $2\frac{7}{8}$ inches.

Cagayancillo, Philippines, Jan. 6, 1903 (type in B. M.).

A handsome insect, belonging to the *paphos* group.

Digama costimacula, nov.

♂. Antennæ simple; palpi white, with black spots at the tips of each joint; frons, head, thorax, and fore wings dark slaty grey, frons and head with white and black spots at the sides; abdomen pale dull pink, with dorsal grey dots: fore wings with three prominent subcostal white spots very close to the costal line, the spots more or less square, the middle one the largest, the first smooth, one fifth from the base, the last at one fourth from the apex: hind wings yellow, with

blackish-brown outer marginal border, terminating abruptly one third from the anal angle. Underside: body and wings yellow; fore wings with a black cell-spot; the outer third of the wing dark slaty grey, the middle portion of its inner margin extending in an angle into the wing.

Expanse of wings $1\frac{3}{10}$ inch.

Gold Coast (*W. H. Johnston*) (type in B. M.).

Belongs to the *Hearseyana* group.

Digama lithosioides, nov.

♂. Palpi white, with black bands at the ends of the last two joints; antennæ simple; frons and head white, two black spots in front of the antennæ, one between them, two on the collar; thorax and fore wings dull ochreous grey, veins grey and rather prominent; hind wings and abdomen dark ochreous; the wings are rather longer than usual, and the example looks like a Lithosid; there are no markings above or below, except a small black dot at the end of cell of the fore wings below.

Expanse of wings 2 inches.

One male, Hills of Terta, Kilimanjaro, E. Africa (type in B. M.).

Digama meridionalis, nov.

♂. Antennæ ciliated; palpi grey, with blackish bands at the ends of the last two joints; head, thorax, and fore wings dark grey, much as in the common Indian form *Hearseyana*, Moore; two black spots in front of the antennæ, one immediately behind, two on the collar, and two on the thorax in front: fore wings with black spots on the costa, three inside the cell, one at the base, and two beyond it below the cell; discal and medial transverse, brown, erect bands below the cell and an outwardly curved, very highly dentated, discal, brown band and similar but smaller dentations on the outer margin; abdomen and hind wings yellow, the latter without markings; the abdomen is more ochreous and darker in colour than the hind wings and has black dorsal spots: the wings are long; fore wing narrow, with the hinder margin curved outwards before the middle. The underside is uniform pale yellow; wings without markings, except a black dot at the end of the cell of the fore wings; abdomen with lateral black spots.

Expanse of wings $1\frac{7}{10}$ inch.

Johannesburg (*A. T. Cooke*); one male.

Digama africana, nov.

♂ ♀. Antennæ of male bipectinate; palpi grey, with black bands at the tips of the last two joints; frons and head white, thorax greyish white; two black dots on the collar, four in a transverse row on the fore part of the thorax; abdomen ochreous, with dorsal black segmental dots: fore wings dark ochreous grey, with a purplish tinge, one fifth at base white, divided by a grey transverse line, containing a black spot in the cell and one near hinder angle; a white medial band, consisting of a large white square patch containing a black spot on the costa and a much smaller patch on the hinder angle; another white patch on the costa at two thirds, with a thin white band running down from it to the hinder angle, angled outwards in its middle, with a curious incomplete white circular mark near the inner side of the angle.

The above is a description of a female from Tonga; the other female and the male from Samburu have all the white bands more or less traceable, but very obscure from greyish suffusion; the hind wings are dark ochreous yellow, with a narrow band at the apex, not continued on the costa or outer margin. On the underside all three examples are identical, being entirely yellow, the fore wings having some traces of the upperside markings and the costal spot rather prominent.

Expanse of wings, ♂ $1\frac{1}{10}$, ♀ $1\frac{3}{10}$ inch.

Samburu, British East Africa (*Betton*); one male. Tonga, British East Africa; two females. Types in B. M.

Digama elongata, nov.

♂. Antennæ with the shafts white, pectinations black; palpi black, white beneath; frons, head, body, and wings white; frons with a large black spot, a small one on the top of the head, three on the thorax dorsal the middle, and three on each side; abdomen with a dorsal row: fore wings with pale blackish broad bands, first basal, for one fifth with a white mark at the base, its outer margin with an outward dentation above the middle and extends in a streak along the hinder margin, joined on the costa to the second band, which has irregular margins on each side and runs obliquely from the middle of the costa to the hinder margin one third from the angle; the third band is discal and runs down only a short distance from the costa, and narrows down to two little spots; the fourth band is composed of elongated spots on the

outer margin: hind wings dull white, with a rather broad, grey, marginal band.

Expanse of wings $1\frac{6}{10}$ inch.

Eb Urru, British East Africa (*Betton*) (type in B. M.).

The fore wings longer than usual in the genus.

Family Acontiidae.

Eublemma acarodes, nov.

♂. Palpi, frons, head, and fore part of the thorax pure white, rest of the thorax, abdomen, and wings pale greyish, veins on both wings darker grey: fore wings with the costal line dark grey; a very broad, dark pink, oblique band, occupying more than half the outer portion of the wing, its inner margin dark grey and well defined, its outer margin suffused with the dark grey colour of the outer margin of the wing: hind wings without markings. Underside: body, legs, and wings white: fore wings suffused with grey except for a broad subcostal ochreous streak from the base for more than half the length of the wing.

Expanse of wings $1\frac{7}{10}$ inch.

Bihé, W. Africa; one example.

Somewhat resembling *E. derogata*, Walker, from India.

Tarache amydra, nov.

♂. Palpi white, with grey bands on the last two joints; head, body, and fore wings dark iron-grey; frons white, with two grey spots; abdomen with white segmental lines: fore wings with the orbicular and reniform whitish, the former containing one, the latter two dark grey spots; the entire wing picked out with many whitish marks, transverse, sinuous, ante- and postmedial, and submarginal lines, and some whitish dots on the costa: hind wings uniform greyish white; cilia of both wings grey, with a whitish interline. Underside: fore wings uniform pale grey, with some blackish and ochreous spots on the outer half of the costa; hind wings pale, with a discal curved grey line; body and legs whitish, the latter with blackish bands.

Expanse of wings $1\frac{8}{10}$ inch.

Bihé, W. Africa; one example.

Tarache apatelia, nov.

♀. White, palpi with last joints black; the frons projection with two black spots touching each other; thorax with

black spots; abdomen suffused with grey, with black segmental bands: fore wings almost entirely covered with dislocated blackish bands, subbasal, ante- and postmedial, and marginal, the last the broadest, only extending two thirds upwards, with a black spot on the costa: hind wings white, with grey marginal borders and a grey dot at the end of the cell. Underside paler, slightly ochreous tinged, markings showing through: hind wings with an additional large grey spot on the costa beyond the middle: body white; legs white, with grey bands.

Expanse of wings 1 inch.

Bilié, W. Africa; one example.

There are several unnamed examples from British East Africa in the B. M. Trifid Drawer 195 which are identical with my specimen.

Family Pyraustidæ.

Isocentris charopalis, nov.

♂. Above clear ochreous-yellow; palpi dark brown at the base: fore wings with a black subcostal spot near the base; transverse lines brown, antemedial nearly erect, medial descending to the hinder margin from a lunular line at the end of the cell, and postmedial from costa to vein 2; a submarginal line, followed by a silvery line, and a marginal chocolate thin band, all close together; cilia white, thickly interlined with chocolate-brown: hind wings with a discal line, curving deeply inwards at vein 4, the marginal marks as in the fore wings. Underside: pectus and body white; legs yellow above, white beneath; tarsi with blackish-brown bands; wings pale yellowish; fore wings with some of the interior lines visible; hind wings without markings.

Expanse of wings $\frac{1}{8}$ inch.

Queensland; one example.

Blepharomastix hedychroalis, nov.

♂. Bright ochreous yellow, transverse lines brown: fore wings with a short line on the lower half very near the base; an antemedial, outwardly curved, even line; a lunular line at the end of the cell; a somewhat irregular and crenulated discal line, which bends outwards below the costa, then curves deeply inwards to the lower end of the cell, then again bends outwards near the hinder margin, to which it then runs down straight; a row of brown points near outer margin: hind

wings whitish in the cell and costal space, with a discal, irregular, recurved line; cilia of both wings yellow. Underside paler than above; fore tarsi with narrow blackish-brown bands.

Expanse of wings $1\frac{9}{10}$ inch.

Port Blair, Andaman Islands; one example.

Calamochrous homochroalis, nov.

♀. Pale greyish ochreous; upper side of palpi, frons, and top of head chocolate-brown; lines brown, thin and crenulated: fore wings with an antemedial line, not reaching the costa; a lunular line at the end of the cell; a discal line fairly erect from costa to vein 2, where it bends inwards and then downwards to the hinder margin: hind wings with a discal recurved line. Underside with the face and body white; legs and wings pale whitish yellow, without markings.

Expanse of wings $1\frac{2}{3}$ inch.

Port Blair, Andaman Islands; one example.

Nacoleia dairalis.

Botys dairalis, Walker, xviii. 698 (1859).

Nacoleia dairalis, Hmps. P. Z. S. 1898, p. 697.

Merotoma dairalis, Swinhoe, Cat. Het. Mus. Oxon. ii. p. 483 (1900).

Sarawak, Borneo.

Type (female), Sarawak, in B. M., and four others (all females) from the same locality. I have received a pair lately from Sarawak the male of which has bipectinate antennæ and has not the characters ascribed to the genus *Merotoma*, Meyrick; it will come into a fresh section of Hampson's genus *Nacoleia*.

Merotoma Meyricki, nom. nov.

Merotoma dairalis, Meyrick (nec Walker), Trans. Ent. Soc. 1894, p. 460.

Pulo Laut, Celebes.

A pair received from Mr. Meyrick from Pulo Laut are in the B. M. with *dairalis*, Walker.

Pyrausta plinthinalis, nov.

♂. Pale primrose-yellow; palpi above, frons, head, and thorax dark yellowish brown; palpi below white; abdomen

white, with a brown dorsal stripe: fore wings with the costa broadly suffused with ochreous brown, the basal portion of the suffusion very dark; a prominent, almost square, blackish-brown spot fills the end of the cell; lines thin, pale, ante- and postmedial, the latter with an outward curve in the middle; an outward marginal line, much thickened and dark brown towards the apex; cilia dark greyish ochreous: hind wings nearly white; a brown spot at the end of the cell; a discal line with an outward bend in its middle, and an outer marginal line as in the fore wings; cilia white. Underside white; fore wings with a brown dot in the middle of the cell, the spot at the end and some of the other markings showing through the wing; hind wings with only a small brown mark at the apex; body and legs white without markings.

Expanse of wings $\frac{1}{6}$ inch.

Padang, W. Sumatra; one example.

IV.—*Descriptions of Six new Species of Coleoptera from New Zealand.* By Major T. Broun, F.E.S.

Group Pogonidæ.

Oöpterus pygmeatus, sp. n.

Subovate, slightly convex, nitid, piceo-fuscous, sometimes more rufescent; legs and antennæ fusco-testaceous or reddish.

Head narrower than thorax, interocular furrows well marked. *Eyes* large, moderately prominent. *Thorax* cordiform, about one-third broader than long, distinctly rounded and marginated laterally, much narrowed but not sinuated behind the middle, posterior angles rectangular; its surface with fine indistinct transverse rugæ, discoidal groove entire and rather feebly impressed, basal foveæ moderately large. *Elytra* ovate-oblong, large, marginal channels well developed, posterior carinæ distinct; they are more or less finely punctate-striate, sometimes irregularly or indistinctly, but, excepting the sutural striæ, they are without sculpture near the apices; the third interstices have three small punctures and fine setæ.

Underside shining, pitchy or reddish; fourth ventral segment with four setigerous punctures at the extremity, the