

*DREPANULIDAE, THYRIDIDAE, EPIPLEMIDAE, AND
GEOMETRIDAE*

FROM THE AETHIOPIAN REGION.

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FAMILY *DREPANULIDAE*.

1. *Ausaris amaura* sp. nov.

Forewings : brownish ochreous, darker brownish towards hindmargin, with all the veins paler ; a silvery-scaled streak along costa from base, becoming subcostal in outer half of wing ; a diffuse brown shade from base through cell towards apex, with a line of silvery scales along its middle ; a large brown mulberry-shaped discocellular blotch with some lustrous scales upon it ; a smaller dark brown blotch between it and apex ; traces of a dull brown lustrous-edged inner line at one-third, more distinct towards inner margin ; a denticulated lustrous line, marked with dark leaden-tinged spots on the veins, from costa before apex to anal angle, preceded by a brown shade and followed by a brown suffusion ; fringe ochreous, marked with brown.

Hindwings : paler, with the submarginal lustrous line and brown shades as in forewings, but not reaching costa ; traces of a central brown shade from inner margin.

Underside uniform ochreous, darker in forewings, without markings except a faint brown straight shade from apex. Thorax, abdomen, and lower half of face ochreous ; upper half of face, fillet, antennae, and palpi dark brown.

Expanse of wings : 26 mm.

1 ♀ from Ogrugu, Amambara River, Lower Niger.

2. *Phalacrothyris subviridis* Warr., Nov. Zool. VI. p. 287.

The specimen from which the above description was made was a ♀ from Warri, in the Niger Delta ; a second ♀ lately received from Sierra Leone, and certainly the same species, shows additional markings, which in the typical specimen were obscured or obliterated ; a darker brown, somewhat paler-edged line runs straight from apex of forewing to middle of the inner margin, before which line, except along the costa, the whole of the basal area is darker than the marginal area beyond it ; besides the dark spot in cell before the hyaline blotch there is also a spot on the submedian fold nearer the base, these two spots apparently representing the course of the inner line ; at middle of costa and on subcostal vein above the hyaline blotch are some brown markings indicative of a median line ; and there is a slight submarginal cloud corresponding to the dark line of the underside. In the hindwing there is a darker brown central belt edged by a paler line and traversed by another, both angled below vein 6 ; a dark brown spot stands at the upper end of the discocellular, and another at the lower end, the latter surrounded by green scales and touching the hyaline spot below vein 4. The ♂♂ (of which there are examples

in the British Museum Collection) are smaller than the ♀♀, purplish grey or liver-coloured, and with the hyaline spots of forewings much restricted in extent.

In the diagnosis of the genus *Phalacrothyris*, I find there was an error in the description of the neurulation. Vein 6, the upper radial, of the forewing is said to be stalked with 7 and 8; as a matter of fact vein 7 is wanting, or rather coincident with 6, the joint vein stalked with 8, which runs as usual into the apex; 9 and 10 are stalked, as stated, and after separating near the costa, 9 is continued nearly to apex, anastomosing at a point with 8.

FAMILY THYRIDIDAE.

3. *Dysodia binoculata* sp. nov.

Forewings: dull deep red; the veins and transverse striae dark fuscous, together forming a somewhat regular reticulation; an oblique slightly funnel-shaped blackish streak from costa beyond middle to middle of inner margin, touching an oval hyaline white spot at end of cell; inner margin diffusely dark; fringe red at base, iron grey beyond. The costa is slightly incurved at middle.

Hindwings: the same, but the hyaline spot larger and round.

Underside duller red, the reticulations less marked, but the central dark streak black and much plainer. Head, thorax, abdomen above and below all red; the face and palpi rather deeper than the rest; dorsal segments of abdomen marked with fuscous; shoulders ashy grey.

Expanse of wings: 26 mm.

1 ♂ from Namaqua Land.

This appears distinct from either of Walker's Natal forms, *intermedia* and *crassa*. It agrees with the American *oculatana* in having the hyaline spot in both wings.

FAMILY EPIPLEMIDAE.

4. *Epiplema ansorgei* sp. nov.

Forewings: dull chalk white, suffused with pale tawny and grey; costa with distinct fine black flecks; first line at about one-third, curved, indistinct, pale tawny; second line from three-fifths of costa, oblique outwards, forming a blunt angle on vein 6, and another, more prominent, on vein 4, then incurved and reaching inner margin vertically at two-thirds; the line itself is tawny, but between the angles marked with black, and is followed throughout by a whitish and then a tawny line; marginal area, except apex, suffused with tawny and grey, the grey forming a submarginal fasciaform cloud, widest at each end; fringe whitish.

Hindwings: with obscure antemedian and distinct postmedian double tawny line, the latter bluntly angled on vein 4; its inner arm marked with blackish above and below the angle, and with minute black specks in the angle; marginal area tawny, edged with pale, containing a metallic streak from anal angle to angle of postmedian line; a dark brown submarginal line between the teeth, and a darker brown spot below lower tooth; fringe tawny.

Underside dull white; the forewings with a broad cloudy dull black fascia, leaving the apex whitish. Head, thorax, and abdomen white; palpi externally blackish.

Expanse of wings : 24 mm.

1 ♀ from Rau, Nandi Country, Feb. 1899 (Dr. Ansorge).

Forewings with hindmargin entire ; hindwings toothed at veins 4 and 7.

5. *Epiplema negro* sp. nov.

Forewings : dull purplish fuscous, with obscure darker streaks ; no inner line visible ; outer line black and diffuse, edged obscurely with rufous, from about middle of costa to two-thirds of inner margin, obliquely bent outwards to vein 4, where it forms a blunt beak, then incurved, and again forming an outward prominence above vein 1, where its black inner edging is thickest ; fringe concolorous.

Hindwings : with the line running from three-fourths of costa to anal angle, bluntly bent on vein 4, the black forming triangles on the veins, the rufous outer edging more apparent ; a slight black line between teeth, and spot below lower tooth.

Underside dull dark grey with transverse darker striae. Head, thorax, and abdomen like wings ; face and palpi, which are long, black.

Expanse of wings : 28 mm.

1 ♂ from Rau, Nandi Country, Feb. 1899 (Dr. Ansorge).

Hindmargin of forewings irregularly jagged, as in *E. moxa* Butl. ; of hindwings with two large teeth at veins 4 and 7, the latter very prominent, and a smaller tooth at vein 6. Superficially much resembling *E. quadricaudata* Wlk.

6. *Epiplema nigrodorsata* sp. nov.

Forewings : chalk-white, dusted and diffused with purplish grey and tawny ; costa dotted with dark grey ; the basal area slightly discoloured with ochreous, and with a few grey scales ; central fascia edged by parallel lines angled on the median and below vein 4 ; filled up, except towards costa, which remains white, with mixed dark purplish grey and tawny scales, which along the outer line reach the costa, and are darkest, forming small blotches against the lines, on the submedian fold ; outer area tinged with tawny grey, except along costa, and a fine line beyond exterior edge of fascia ; five submarginal black spots from apex to vein 4, beyond which the wing is dark grey ; fringe grey from apex to vein 4, then white.

Hindwings : with a similar central fascia, blackish edged, but this nearly white, except along outer edge, while the basal and marginal areas are more or less suffused with purplish grey ; dark lunules along the margin from tooth to tooth.

Underside white, finely strigulated with fuscous, and with a rosy bronze tinge according to the incidence of light. Face and palpi blackish ; vertex, thorax, and abdomen white, the last purple-grey along the dorsum.

Expanse of wings : 17 mm.

1 ♀ from Kuhliri River, Angola, November 1899 (Penrice).

FAMILY GEOMETRIDAE.

SUBFAMILY PSEUDOTERPNAE.

7. *Pingasa interrupta* sp. nov.

Forewings : ochreous whitish, slightly dusted with olive scales ; the lines fuscous olive ; the first angled above and below the median, as in *rhadamaria* Guen. ; the outer less denticulate, starting from costa at three-fifths, running much

more vertically from the costa, not obliquely outwards, and forming a conspicuous outward curve in middle of wing; the marginal area, which is broader than in *rhadamaria*, filled up with a mixture of olive-green, fuscous, and reddish scales; the submarginal line well marked by acute teeth; a pale blotch at middle of hindmargin and at anal angle; marginal spots between the veins; fringe ochreous, mottled with olive-green; cell-mark fuscous olive.

Hindwings: with the outer marginal area darkened only in the costal half, and there mixed with blackish scales; no cell-spot.

Underside whitish, slightly yellow tinged at base; forewings with smoky blackish broad marginal border, the inner edge of which is nearly straight from costa to above anal angle, and containing a white marginal blotch at apex and below middle; hindwings with a large subapical dark blotch and smaller one above anal angle, sometimes united; cell-spot of forewings distinct. Head, thorax, and abdomen ochreous, slightly tinged with pale olive.

Expanse of wings: 48 mm.

3 ♂♂ from Rau, Nandi Country, February 1899 (Dr. Ansorge); taken at the same time as a series of *rhadamaria* Guen., but quite distinct. It appears to be the corresponding African form of *ruginaria* Guen. from India. There are examples in the British Museum from Kilima-njaro.

SUBFAMILY GEOMETRINAE.

8. *Antharmostes? albisticta* sp. nov.

Forewings: deep blue-green; costa ochreous, flecked with dark brown; marginal line red-brown, slightly curved inwards from vein to vein, and followed by a fine white line, which swells out into clear white spots beyond the veins; no markings except a small white spot, externally dark-edged, at middle of inner margin; fringe pale ochreous, mottled with grey externally.

Hindwings: like forewings, but without the white spot.

Underside uniform whitish green; base of costa of forewings brownish-tinged. Head, thorax, and abdomen ochreous, the five middle segments of the last with saddle-shaped marks of brown scales along dorsum separated by paler spots; face dull brown.

Expanse of wings: 26 mm.

1 ♂ from Rau, Nandi Country, February 1899 (Dr. Ansorge).

This species does not agree in all points with the type species; the palpi are long and well-developed, and the antennae fully pectinated; veins 3 and 4 rise together from lower angle of cell in forewing; but it may be placed here for the present.

9. *Eucrostes innotata* sp. nov.

Forewings: pale green, with faint traces of a straight inner and outer pale line; fringe concolorous; no cell-spot; costa pale ferruginous.

Hindwings: without markings.

Underside pale green, the costa of both wings ferruginous. Palpi externally, forelegs, antennae, and lateral edges of frons ferruginous; face, vertex, thorax, and abdomen green like the wings; base of shoulders tinged with ferruginous.

Expanse of wings: 15 mm.

1 ♂ from Benguela, December 1898 (Penrice),

Mixocera gen. nov.

This new generic name is proposed for two or three species differing from *Nemoria* on the one hand, and *Microloxia* Warr. on the other, in the structure of the ♂ antennae. The shaft is broadened and flattened, armed along the basal half with short claw-shaped fascicles of cilia in place of the pubescence of the one and the full pectinations of the other. In the forewings veins 6, 7, 8, 9, 10, 11 are all stalked from the upper end of cell, 11 anastomosing and sometimes becoming coincident with 12. Frenulum absent.

Type : *M. indecretata* Wlk. *Latilineata* Wlk. from Australia, and *serraticornis* Warr. from Africa, also belong here, as well as the following new species.

10. **Mixocera albimargo** sp. nov.

Like *M. latilineata* Wlk. from Australia, but with an additional white marginal streak to both wings ; fringe white.

Expanse of wings : 17 mm.

1 ♂ from Ogrugu, Amambara River, Lower Niger.

Pycnodontia gen. nov.

Forewings : elongate ; costa slightly curved ; apex prominent ; hindmargin oblique, slightly curved.

Hindwings : with hindmargin well rounded ; anal angle well marked.

Palpi short, porrect, not reaching beyond forehead ; antennae of ♂ lamellate, with short, broad, clavate teeth ; tongue and frenulum present ; hind-tibiae with four stout and approximate spurs.

Neuration : forewings, cell nearly half as long as wing ; discocellular oblique inwards above, outwards below ; first median nervule at three-fourths, second close before third ; lower radial from upper two-thirds of discocellular, upper from upper angle of cell ; 7, 8, 9, 10, stalked from the angle ; 11 free, approximated to 12 ; hindwings, costal shortly touching subcostal near base ; 6 and 7 stalked ; medians as in forewing.

Type : *Pycnodontia apicata* sp. nov.

Characterized by the structure of the ♂ antennae.

11. **Pycnodontia apicata** sp. nov.

Forewings : pale green, without markings ; fringe pale green.

Hindwings : the same ; fringe in the apical half tinged with brown-grey.

Underside whitish green ; base of costa of forewings reddish ; face, palpi, and forelegs vinous red ; head, thorax, and abdomen like wings ; antennae ochreous.

Expanse of wings : 34 mm.

1 ♂ from Mpwapwa, German East Africa (Dr. Baxter).

12. **Rhomborista palliata** Warr., Nov. Zool. V. p. 16, ♀.

„ **ustipennis** Warr., Nov. Zool. V. p. 236, ♂.

The types, both from Warri, differ both in the shape and coloration of the markings ; the colour of the blotches being red-brown in *palliata*, and black-brown in *ustipennis*, while the extent of the blotches is much greater in the ♂ than in the ♀. I have now seen another ♂, from Sierra Leone, which agrees in coloration with

*palliat*a and in the size of the blotches with *ustipennis* ; so that there can be no doubt that the two are sexes of the same species. The green tint of the lines is visible only in the ♀, their course being marked in the ♂ only by the red vein dots ; the outer line of dots, owing to the larger size of the marginal red blotch, passes through it and is obscured in the ♂. The vertex and shoulders are both pale green ; the fillet narrowly white. The ♂ from Sierra Leone differs slightly from the Warri ♂ in the outline of the dark blotch of hindwings, and in the extent to which the dark markings are represented on the underside.

SUBFAMILY STERRHINAE.

13. *Cacorista rufimixta* sp. nov.

Forewings : dull pinkish ochreous ; the costa and three oblique lines, antemedian, median, and postmedian rufous tinged ; the lines diffuse, edged inwardly with some darker scales, and distinct only in the costal half of wing ; fringe concolorous.

Hindwings : slightly paler, without any markings.

Underside yellow ochreous, suffused with dull rosy, except along inner margin of forewings ; thorax and abdomen like wings ; face, vertex, and antennae dark brown.

Expanse of wings : 15 mm.

1 ♂ from Ogrugu, Amambara River, Lower Niger.

14. *Craspedia crassipuncta* sp. nov.

Forewings : whity brown, fuscous-speckled, and towards hindmargin suffused with fuscous ; inner and median lines indistinct, the first curved, the second sinuous ; outer line at three-fourths, lunulate-dentate, the teeth slightly darker, followed by a narrow paler space ; submarginal line regularly waved, preceded and followed by a dark shade ; a row of black marginal dashes between the veins, which are all somewhat paler towards hindmargin ; fringe paler, with darker dots beyond the vein ends on a middle line ; cell-spot blackish, large.

Hindwings : without basal line, the others distinct ; cell-spot large, linear, black.

Underside dull greyish ochreous, with the markings darker grey ; cell-spots and marginal spots blackish ; face and palpi black-brown ; collar dark ; thorax and abdomen like wings, the segments of the latter ringed behind with paler ; vertex and shoulders pale ochreous.

Expanse of wings : 22 mm.

2 ♀ ♀ from Benguela, December 1898 (Penrice).

15. *Craspedia fuscobrunnea* sp. nov.

Forewings : dull smoky fuscous brown, including the fringes ; no distinct markings except a darker outer line, slightly angled at vein 6, and an obscure cell-spot ; the space between median line and outer line slightly paler than the rest of the wing.

Hindwings : the same.

Underside much paler, dull grey ; the marginal area beyond outer line darker ; traces of a median shade ; head, thorax, and abdomen like wings ; abdomen beneath and legs ochreous grey.

Expanse of wings : 26 mm.

2 ♂♂ from Rau, Nandi Country, February 1899 (Dr. Ansorge).

Like *hectata* Guen. in shape, but smaller and very much darker ; the hind-margin of hindwings bulges somewhat in middle, the tooth at vein 4 being ill-formed.

16. *Craspedia sanguinisecta* Warr., Nov. Zool. IV. p. 53.

The name was given to a ♀ described from Weenen, Natal. Since that description was made, I have seen 3 ♂♂, one from Grahamstown and two from Angola ; in these, which are all slightly larger than the ♀, the dark markings beyond the outer line, which in the type ♀ are blood-red, are either tawny brown or quite black. Either, therefore, these markings differ in colour in the sexes, or, as is more probable, are variable in both.

17. *Craspedia sincera* sp. nov.

Forewings : chalk-white, the costal area slightly black-speckled ; the four lines all oblique, parallel to hindmargin, yellow ochreous, rather thick, inner, median, postmedian, and submarginal ; cell-spot and marginal spots small, distinct, black ; fringe pure white.

Hindwings : the same, without first line.

In both wings the two outer lines are incurved beyond cell.

Underside white, slightly greyish tinged in forewings ; cell-spots and marginal spots black ; head, thorax, and abdomen white ; the yellow lines of hindwings marked on dorsum ; face and palpi black.

Expanse of wings : 24 mm.

1 ♂ from Cubal River, Angola, March 1899 (Penrice).

18. *Janarda flamingo* sp. nov.

Forewings : coppery fulvous, with slight darker speckling in places ; the lines blackish ; first at one-third, slightly curved near costa, oblique inwards ; median, very indistinct, sinuous ; exterior from three-fourths of costa to five-sixths of inner margin, rather sharply angled outwards on vein 6, then sinuous, parallel to hind-margin ; a slightly deeper marginal line ; fringe concolorous.

Hindwings : without distinct lines.

Underside : much paler ; the two outer lines of forewings shown, and similar lines indicated on hindwings ; marginal line on both wings thick, deep purple, interrupted at the veins ; cell-spots brown ; head, thorax, and abdomen fulvous ; face dark brown.

Expanse of wings : 22 mm.

1 ♂, 1 ♀ from Luacinga River, Angola, November 1899 (Penrice).

SUBFAMILY TEPHROCLYSTIINAE.

19. *Gymnoscelis crassata* sp. nov.

Forewings : pale brownish ochreous, the lines and markings dark brownish purple ; the lines all distinctly angled in mid-wing ; first close to base, obscure ; second at one-fourth, followed by a diffuse dark band, marked with darker on the costa and veins, and protruding an angle in cell ; outer line at two-thirds, thick and

indistinctly crenulate, angled on the median vein, followed by first a dull lilac and then a fine brown line; submarginal line denticulate but very indistinct, preceded and followed by thick purplish brown shades, both interrupted by the ground colour between veins 6 and 7, and 3 and 4; a dark marginal line; fringe ochreous, varied with purplish. In the central fascia an angulated rufous line is traceable.

Hindwings: with two short purplish lines close to base, the rest of the wing as in forewings.

Underside shining, pale bronzy, fuscous-tinged towards hindmargins, with traces of the outer lines and of cell-spot; head, thorax, and abdomen ochreous, dusted with purplish scales.

Expanse of wings: 17 mm.

1 ♀ from the island of S. Thomé, October and November 1899 (Mocquerys).

Possibly an Iramba.

20. *Gymnoscelis tenera* sp. nov.

Forewings: pale pinkish ochreous, dusted with grey, the costal half of wing darker than the inner half; the basal patch and central fascia slightly darker and edged by fine waved whitish lines; the submarginal line very fine and preceded by darker patches at costa, beyond cell, and above inner margin; marginal line finely blackish; fringe pinkish grey.

Hindwings: similar.

Underside shining, whitish, with the markings grey; head, thorax, and abdomen concolorous.

Expanse of wings: 10—14 mm.

2 ♂♂, 1 ♀, from Ogrugu, Amambara River, Lower Niger.

SUBFAMILY ASTHENINAE.

21. *Asthenotricha inutilis* sp. nov.

Forewings and *Hindwings*: superficially resembling those of *flavicoma* in coloration and markings, except that all the lines are more regularly waved; neither forewing nor hindwing, however, possesses the modified scales and tuft of hair by which the genus is characterised, nor is the costa of the hindwings shouldered at base. The specimens agree in having the antennae of similar structure, thickened with clavate teeth.

Expanse of wings: 26 mm.

4 ♂♂ from Rau, Nandi Country, February 1899 (Dr. Ansorge), taken along with several examples of *A. flavicoma* and one of *lophopterata*.

22. *Dichroma alternata* sp. nov.

Forewings: shining silvery white; crossed by four oblique, somewhat irregularly margined olive-brown fasciae, all finely edged with black scales; one close to base; second antemedian, swollen laterally below the subcostal vein; third postmedian, with a large projection basewards below subcostal and its outer edge regularly undulated; fourth submarginal, with both edges waved and not quite reaching the costa; fringe olive-brown.

Hindwings: greyish ochreous, with indications of a broad curved darker

postmedian band and a narrow wavy edged one before hindmargin, which, as well the fringe, is pale.

Underside of forewings dark grey, of hindwings white; fringe of both wings white; face and palpi above olive-brown, whitish below; thorax and basal segments of abdomen whitish; rest of abdomen like hindwings.

Expanse of wings: 28 mm.

1 ♂, 2 ♀♀, from Cubal River, Angola, March 1899 (Penrice).

The antennae are lamellate, laterally flattened; in the ♂ closely serrate, with clavate teeth. The hindwings of ♂ have a long oval hyaline space at base below the median; vein 1 appears to rise from its base and runs into hindmargin before the anal angle.

SUBFAMILY HYDRIOMENINAE.

23. *Ochyria trientata* sp. nov.

Forewings: whitish; this ground-colour, however, only showing in the band beyond the central fascia, which is dark fuscous or blackish, occupying the middle third of the wing; its inner edge is regularly curved from one-third of costa to two-fifths of inner margin, its outer forming a blunt double prominence in middle, and a slighter one on vein 6; the basal third is suffused either with dark fuscous, reddish fuscous, or dull reddish; the central fascia is edged outwardly first by a fine white line, followed by a pale band with a dark thread through it, followed in its turn on the costa by a dark blotch separated from the rufous fuscous marginal area by an oblique apical streak; the submarginal line indistinct, and represented only by whitish spots at the ends of the teeth, which are sometimes filled up with darker; marginal dots in pairs at the vein ends; fringe fuscous varied with rufous, and chequered with darker beyond veins.

Hindwings: with the inner two-thirds grey, with three darker grey curved lines; the outer third reddish; marginal spots distinct.

Underside of both wings with basal two-thirds grey, outer third reddish; the forewings with cell-spot and three curved lines, the hindwings with cell-spot and outer dotted line only. Thorax and abdomen dark grey; face and prothorax agreeing in colour with the basal patch.

Expanse of wings: 28 mm.

Nine examples, all ♂♂, from Rau, Nandi Country, February 1899 (Dr. Ansorge).

Easily distinguishable by the two colours of the underside; the amount of red showing through on the upperside varies much; and in one example the fuscous tints of the basal two-thirds extend over the whole wing to the hindmargin, obscuring the markings.

SUBFAMILY PALYADINAE.

24. *Melinoessa pauper* sp. nov.

Forewings: deep yellow ochreous, covered throughout with dense and partially confluent fulvous striae, the areas with fewest striae being those immediately beyond the outer line; a broad grey black-speckled costal streak; first line nearly straight at one-third; second from two-thirds of costa, forms a more prominent beak externally on vein 4 than is seen in *M. sodaliata* Wlk., its lower half reaching inner margin at two-thirds, parallel to first line; the submarginal line of silvery

white spots is wanting, these being reduced to minute dots edged by black scales, the white spot at vein 4, touching the outer line, alone remaining in either wing, but smaller, as is the white discal annulus of the forewing ; fringe of hindwing yellow throughout, of forewing yellow from vein 4 to 2, the rest fulvous.

Underside bright straw-colour, in the forewings tinged with yellow and with rufous striae and dots ; a brown apical blotch on forewings reaching to vein 4, and a small upright blotch above anal angle ; cell-spot reduced to a brown speck ; hindwings without striae except along hindmargin ; a brown marginal blotch at middle and anal angle. Thorax, abdomen, tips of patagia, and front of face fulvous ; vertex, shoulders, and base of patagia grey.

Expanse of wings : 44 mm.

One ♀ from Rau, Nandi Country, February 1899 (Dr. Ansorge).

SUBFAMILY DEILINIINAE.

Cacostegania gen. nov.

Forewings : costa arched at base, then straight ; apex blunt ; hindmargin oblique, hardly bowed, till near anal angle.

Hindwings : broad ; hindmargin well rounded, both angles strongly marked. Antennae in ♂ strongly bipectinated ; palpi very short ; tongue and frenulum present ; hind-tibiae with four spurs.

Neuration : forewings, cell nearly half as long as wing ; discocellular inangulated ; first median nervule at five-eighths, second at seven-eighths ; lower radial from above centre of discocellular, upper from upper angle of cell ; 7, 8, 9, stalked from close before end ; 10 and 11 coincident, anastomosing with 12 and again with 8, 9 : hindwings, costal very shortly approximated to subcostal ; 3 and 7 well before angles of cell. Forewings with small and inconspicuous fovea. Scaling fine and glossy.

Type : *Cacostegania australis* sp. nov.

Probably the species described by me (Nov. Zool. VII. p. 94), as *Parasynegia rufigrisea*, the type a ♀, from Old Calabar, will, when the ♂ can be compared, be found to belong to this genus.

25. *Cacostegania australis* sp. nov.

Forewings : pinkish grey, very thickly sprinkled with small fuscous and reddish scales ; the lines deep red ; inner from nearly one-fourth of costa to one-third of inner margin, bluntly angled outwards in cell and on submedian fold, and inwards on subcostal and submedian veins ; outer, lunulate-dentate, from four-fifths of costa to four-fifths of inner margin, the lunules beyond cell and that on submedian fold nearer the base of wing ; traces of a red submarginal line, mainly at costa and on inner margin ; a red marginal line ; fringe rufous grey ; cell-mark linear, red ; the costal edge also red.

Hindwings : without first line ; outer line irregularly waved and bent, not dentate, from three-fifths of costa to inner margin shortly above anal angle ; cell-spot obscure ; in both wings the marginal area is deeper tinted than the basal. Face and collar deep red ; thorax and abdomen concolorous with wings ; vertex and antennal shaft snow-white.

Underside of wings glossy whitish, without any markings ; the forewings with a pinkish tinge.

Expanse of wings : 28 mm.

One ♂ from Longa River, Angola, November 1899 (Penrice).

26. *Zamarada angustimargo* sp. nov.

Forewings : pale hyaline green with faint dark speckles ; costa ochreous with dark specks ; a very narrow hindmarginal border pinkish grey with dark atoms, internally edged by a line of black scales uniformly undulating between the veins, and becoming quite pale before the ochreous yellow fringe ; no cell-spot.

Hindwings : with the marginal border still narrower.

Underside with the marginal border dark liver-coloured up to the fringe, which is yellow, and edged internally by a yellowish undulating line. Vertex and face greenish ochreous, the face thickly dusted with bright ferruginous ; shoulders pale lilac-grey ; abdomen ochreous, dusted with red scales along dorsum.

Expanse of wings : 27 mm.

One ♂ from Luacinga River, Angola, November 1899 (Penrice).

From the narrowness of the dark border only to be compared with *Z. cosmiaria* Swinh. from India.

27. *Zamarada? confusa* sp. nov.

Forewings : with basal two-thirds dull deep yellowish with reddish speckles ; costa at base and basal area slightly reddish ; outer third dull reddish brown, its inner edge curved from costa to submedian fold, then vertical to inner margin ; a row of dark marginal spots before the reddish fringe.

Hindwings : similar.

Underside much duller, the marginal area ill-defined. Head, collar, and antennae dark purple-brown, the vertex and face varied with ferruginous scales ; thorax and abdomen like base of wings.

Expanse of wings : 27 mm.

One ♂ from Luacinga River, Angola, November 1899 (Penrice).

Differs from typical *Zamarada* in that 10 and 11 coincident anastomose with 12 ; vein 3 in both wings from some little space before lower angle of cell.

28. *Zamarada flavicaput* sp. nov.

Forewings : hyaline, very pale greenish, dusted with darker scales ; costa rather bright orange with dark scales ; marginal border narrow, deep purple-red, edged by a black line scarcely undulating and forming a double shallow sinus between veins 2 and 4, with a vinous-red toothed submarginal line through it ; fringe worn, apparently reddish ; cell-spot dark.

Hindwings : with marginal border still narrower ; cell-spot dark.

Underside with marginal border dark red-brown. Face red-brown ; vertex and collar yellow with bright orange scales ; shoulders and patagia lilac-grey ; abdomen red-brown.

Expanse of wings : 26 mm.

One ♀ from Luacinga River, Angola, November 1899 (Penrice).

SUBFAMILY SEMIOTHISINAE.

29. *Gonodela mundipennis* sp. nov.

Forewings : pale grey with very slight fawn-coloured tinge, and speckled finely with blackish ; the marginal space beyond third line fawn-colour ; lines very obscure ; first curved, from before one-third of costa to one-fifth of inner margin ; median from a little before middle of costa to before middle of inner margin, slightly outcurved round the distinct large black cell-spot ; outer line from three-fourths of costa to two-thirds of inner margin, very indistinct below costa and appearing simply curved along the course of the darker outer line of the underside which shows through from beneath, but really angled, as usual, on vein 6 ; no trace of dark marginal line or spots ; fringe concolorous, with a pale basal line and finely paler middle line.

Hindwings : similar ; median line slightly marked from inner margin to the black cell-spot ; small marginal black dots between the veins.

Underside with the basal two-thirds whitish striated with dark ; marginal third rufous fawn-colour, edged internally by a crenulate dark brown line, and with traces of a submarginal line, most distinct in the lower half of wing, where it is preceded by a dark cloud and followed by a paler patch ; in the hindwings the outer edge of the submarginal shade is evenly undulating throughout ; fringe of hindwings whitish. Face and palpi brownish above, paler beneath ; collar brownish, vertex pale ; thorax and abdomen like wings.

Expanse of wings : 40 mm.

1 ♀ from the Calwella River, Angola, June 1898 (Penrice).

Crassilembaria Mab. from Madagascar must be somewhat like this species in appearance, but the expanse of that insect is given as 27 mm. only.

30. *Semiothisa majestica* sp. nov.

♂. *Forewings* : very pale ochreous, with slightly darker but inconspicuous dusting ; the lines pale brown ; first from one-fifth of costa to one-fourth of inner margin, obtusely angled just above median vein ; second from middle of costa to middle of inner margin, bent outwards and bluntly curved beyond cell ; cell-mark linear, brown, preceded by a straight brown line from costa showing through from the underside ; outer line from four-fifths of costa, below which it is curved, then straight to three-fourths of inner margin ; marginal area beyond outer line slightly darker, especially close to the line, which is followed on costa by a short brown streak ; a dark brown marginal line along the excision from vein 7 to 4, where the ochreous fringe also is dark brown.

Hindwings : with nearly straight antemedian line and black cell-spot ; the outer line obscurely double. Head, thorax, and abdomen concolorous with wings. Underside of wings warmer ochreous, with all the markings distinctly brown, except the inner and median lines of forewings, which are very faint.

♀ greyer ochreous, with strongly marked brown striations ; all the lines darker ; a fine brown marginal line in both wings.

Expanse of wings : ♂ 40 mm. ; ♀ 44 mm.

A pair from Longa River, Angola, November 1899 (Penrice). The difference in colour between the sexes, which is very noticeable in these two specimens, is probably not constant.

The antennae of the ♂ are thickened and flattened in the basal third, with strongly marked triangular joints, the rest subserrate with fascicles of cilia.

Forewings of ♂ with large fovea, of which there are traces in the ♀ also.

31. *Tephrinopsis illineata* sp. nov.

Forewings : dull white, thickly striated with olive fuscous ; no distinct lines ; but through the thickening of the striae traces of a curved line near base, and a median line can be traced ; at four-fifths a submarginal olive fuscous fascia, with diffuse inner and more defined outer edge ; the lower part of this fascia is widened at inner margin, its outer edge curved and ending below vein 4 in a small wedge-shaped brown projection towards hindmargin ; the upper part is cut off short at vein 6 ; into the space between these portions runs the apex of an olive fuscous triangular patch on hindmargin, which is connected above with a small apical patch, and below with a semi-oval patch, these marginal shades being separated from the submarginal fascia by the curved white submarginal line, which, like the fascia, is also interrupted beyond cell ; an interrupted dark marginal line ; fringe olive-brown, with darker median line ; cell-spot brown ; costa yellowish, with small black striae.

Hindwings : with the outer fascia unbroken, submarginal white space broader between veins 3 and 4.

Underside with the markings duller ; head, thorax, and abdomen whitish speckled with fuscous.

Expanse of wings : 22 mm.

1 ♂ from Benguela, January 1899 (Penrice).

It is possible that this insect may turn out to be the ♂ of *T. alternata* from Delagoa Bay, wrongly described as a *Gonodela* (cf. Nov. Zool. VI. p. 306), to which, except for the entire absence of lines, it bears a great resemblance.

32. *Tephrinopsis ochriciliata* sp. nov.

Forewings : pale yellowish ochreous, densely and finely sprinkled with reddish fuscous speckles ; costa with short dark striae ; the lines distinct, reddish brown ; the first, acutely angled on the subcostal vein, from one-fourth of costa to one-fourth of inner margin ; the second quite straight from middle of costa to a little before middle of inner margin ; the outer from five-sixths of costa to three-fourths of inner margin, slightly curved above middle, and preceded by a narrow pale unspeckled line ; marginal line very fine and concise, blackish, interrupted at the ends of the veins ; fringe clear shining ochreous, the tips from apex to vein 3 shining grey.

Hindwings : the same, without first line ; the fringe with grey tips, except at apex and anal angle.

Underside with the speckling and lines redder and plainer ; no basal line on forewings ; cell-spots distinct ; in one example these also show on the upper side ; head, palpi, and base of shoulders brown ; thorax and abdomen like wings.

Expanse of wings : 28—30 mm.

2 ♂♂ from Cubal River, Angola, February and April 1899 (Penrice).

Forewings with slight fovea ; antennae with angulated joints and fascicles of cilia.

SUBFAMILY ENNOMINAE.

Acanthoscelis gen. nov.

Forewings : ample ; costa straight till near apex ; hindmargin slightly oblique and hardly curved.

Hindwings : with well-rounded hindmargin.

Antennae of ♂ heavily bipectinated, the apical fifth serrate ; palpi porrect, hairy, reaching a little in front of face, terminal joint short and obscure ; tongue and frenulum present ; pectus somewhat woolly ; hind-tibiae with four acute spurs ; all the tarsi beneath with rows of spinous hairs and ending in a double claw.

Neuration : forewings, cell half as long as wing ; discocellular vertical above, oblique below ; vein 2 just beyond middle of cell, 3 shortly before end ; radials normal ; 7, 8, 9 stalked from the angle ; 10, 11, from cell ; 11 anastomosing with 12 ; 10 approximated closely to but not anastomosing with 11 ; hindwings, with 7 and 3 both before angles of cell ; 2 at two-thirds.

Type *Acanthoscelis tarsispina* sp. nov.

Characterised by the spinous clawed tarsi.

33. **Acanthoscelis tarsispina** sp. nov.

Forewings : ochreous with a rufous tinge, speckled with darker, the speckles towards apex and hindmargin becoming blackish ; first line at one-fourth, curved, but very indistinct, marked on costa by black scales ; outer line nearly straight and oblique, pale, from two-thirds of inner margin towards apex, before which it is bluntly angled and retracted to costa, edged inwardly on inner margin with rufous, and on costa with dark fuscous, and there followed by a small white tooth ; cell-spot black, distinct ; fringe concolorous.

Hindwings : paler towards costa ; the pale line central and edged internally with rufous.

Underside paler ; the costal area of forewings rufous tinged ; no markings except a brown tooth on costa representing the white tooth of upperside ; head, thorax, and abdomen ochreous, tinged in parts with rufous ; vertex of head white.

Expanse of wings : 44 mm.

1 ♂ from Second Kedong, British East Africa, February 1899 (Dr. Ansorge).

Superficially this insect resembles *Microgonia mundata* Guen. from America.

34. **Aeschropteryx ansorgei** ab. **subrufa** nov., and **diffusa** nov.

This species proves to be very variable ; of 4 ♂♂ from Rau, Nandi Country, all differ from the type form. One, ab. *subrufa*, which agrees with it in having the outer oblique line fine and thin, instead of having the ground colour pale yellow, is pale ochreous with a rufous flush throughout ; the others, ab. *diffusa*, on the contrary, agree with the type form in ground colour, but have the line thick, chestnut-brown, with a diffuse shade on either side but thickest externally, the subapical spot being likewise filled up with brown ; in the forewings a rufous cloud runs from anal angle to the oblique line at its middle, and in the hindwing the rufous tint takes the form of a zigzag submarginal shade, with a cloud beyond it. In one of these three, moreover, the oblique line itself, instead of running straight throughout, is bent round at vein 2. All four specimens were taken February 23rd and 24th, 1899, by Dr. Ansorge.

35. *Aeschropteryx atomaria* sp. nov.

Forewings: ochreous, densely dusted throughout with very fine rufous-fusca atoms; a straight oblique dark line from two-thirds of inner margin towards apex, before which it thins out; a distinct black cell-spot; first line represented by a short oblique costal streak at two-fifths, close before the cell-spot; fringe concolorous.

Hindwings: with the line central, just beyond the cell-spot. In one of the two examples the outer line is altogether wanting.

Underside paler; the inner marginal area without freckling; head, thorax, and abdomen like wings; face brown.

Expanse of wings: 38 mm.

2 ♂♂ from Rau, Nandi Country, February 1899 (Dr. Ansorge).

The hindwings are merely bluntly elbowed in the middle, not produced into a tooth, nor marked with any dark spot. The species is evidently related to *tabitha* Warr., described as an *Epigynopteryx*, but which would perhaps be better placed with the present species in *Aeschropteryx*.

36. *Epigynopteryx commixta* sp. nov.

Forewings: dull yellow, varied with coarse granular rufous grey dots and striae; an irregularly shaped vertical line near base, and slightly curved ill-marked dentate lunulate line at two-thirds; both these lines diffuse; cell-spot black, distinct; fringe glossy white with a chestnut line at base, preceded by a narrow rufous shade from below the apex, marked (in one example) with black scales at the ends of veins 3 and 4.

Hindwings: with the costal area whitish; a bluntly angled median line, beyond which the marginal half is suffused with dull rufous fuscous; the marginal shade and black scales intensified, the tooth with two black spots.

Underside with all the markings much paler; head, thorax, and abdomen dull yellow; the face tinged with rufous.

Expanse of wings: 35 mm.

2 ♂♂ from Rau, Nandi Country, February 1899 (Dr. Ansorge).

The forewings are bluntly bent, the hindwings strongly toothed, at vein 4. In one example there are dark blotches beyond the exterior line indicating a submarginal line.

37. *Eurythecodes maculosata* sp. nov.

Forewings: pale yellow, speckled with fulvous, and beyond the outer line suffused with the same colour; the costa striated with fulvous; a thick fulvous line at one-fourth, bent on the median vein, and touching there a similar sinuous median line which passes over the small black cell-spot; outer and submarginal lines finer and darker, both irregularly sinuous, the outer from two-thirds of costa, the submarginal from shortly before apex, both curved below costa, and nearly meeting on inner margin at two-thirds, the space beyond outer line fulvous except a small yellow patch within the subcostal angle of submarginal line, another outside and below it, and a larger patch at anal angle; fringe fulvous brown.

Hindwings: with a single irregularly waved dark brown postmedian line from two-thirds of costa to three-fourths of inner margin; an antemedian fulvous cloud;

outer area irregularly suffused with fulvous, with interrupted traces of a yellow submarginal waved line.

Underside similar, with all the tints brighter and plainer. Head, thorax, and abdomen yellow speckled with bright fulvous.

Expanse of wings : 40 mm.

1 ♂ from the Kassai and Loangè Rivers, Congo, September 1893 (Andreae).

38. *Paracrocota maeviaria*.

Aspilates maeviaria Guen. Phal. ii. p. 185.

A ♀ from Cubal River, Angola, April 1899 (Penrice), agrees well with Guenée's description, but can hardly be left in the genus *Aspilates*. It agrees in venuration with *Paracrocota epionata* Warr. ; but not in shape of wings : inasmuch as the apex of forewing is very decidedly produced, the hindmargin beneath the apex being slightly indented, and faintly bulging at middle ; the hindmargin of hindwings is evenly curved throughout, and not at all projecting at middle.

The forewings are rather deep yellow, with a few dark brown atoms, mainly towards the costa ; the costal region is tinged with orange, the costal edge being grey, and there is an orange spot on inner margin at the usual place of the first line ; the oblique streak from apex is broadly pale liver-coloured, distinctly edged internally with darker, and externally with some orange scales, containing a dot of black scales between the veins. Hindwings pale yellow, almost whitish in costal half, with a curved streak from three-fourths of inner margin, running parallel to hindmargin, and becoming obsolete before reaching the costa ; both wings with distinct cell-spot.

Expanse of wings : 36 mm.

On the underside the hindwings are deeper yellow than the forewings, with coarse brown speckling and the line brown and well-marked throughout ; the forewings pale yellow with the line faint except towards apex.

I have given this fresh description because Guenée's original one is somewhat less ample than usual, and was made mainly by a comparison with *A. gilvaria* of Europe.



Warren, William. 1901. "Drepanulidae, Thyrididae, Epiplemlidae, and Geometridae from the Aethiopian region." *Novitates zoologicae : a journal of zoology in connection with the Tring Museum* 8, 202–217.

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