This article was downloaded by: [UQ Library]

On: 13 March 2015, At: 22:12

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number:
1072954 Registered office: Mortimer House, 37-41 Mortimer Street,
London W1T 3JH, UK

Annals and Magazine of Natural History: Series 6

Publication details, including instructions
for authors and subscription information:
<http://www.tandfonline.com/loi/tnah12>

XXXIII.—New species of Pyralidæ &c. from the Khasia hills

W. Warren M.A. F.E.S.

Published online: 02 Oct 2009.

To cite this article: W. Warren M.A. F.E.S. (1896) XXXIII.—New species of
Pyralidæ &c. from the Khasia hills , Annals and Magazine of Natural History:
Series 6, 18:105, 214-232, DOI: [10.1080/00222939608680444](https://doi.org/10.1080/00222939608680444)

To link to this article: <http://dx.doi.org/10.1080/00222939608680444>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of
all the information (the "Content") contained in the publications
on our platform. However, Taylor & Francis, our agents, and our
licensors make no representations or warranties whatsoever as
to the accuracy, completeness, or suitability for any purpose of
the Content. Any opinions and views expressed in this publication
are the opinions and views of the authors, and are not the views
of or endorsed by Taylor & Francis. The accuracy of the Content
should not be relied upon and should be independently verified
with primary sources of information. Taylor and Francis shall not be
liable for any losses, actions, claims, proceedings, demands, costs,

expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

prominences, and muscularity of body as in *hispid*a. No diverticula from digestive tract. In this form the nervous structures are especially large and prominent. The ovaries were short, though containing ova approaching maturity. Germinal epithelium composed of a single row of high columnar cells, not a double row of cubical, as in the forms like *bipunctata*.

S. tenuis differs from *hispid*a in size, in the prominence of the nervous structures, in the relatively shorter caudal segment, and the absence of diverticula from the digestive tract. It might seem that the specimens were young *hispid*a, were it not for the advanced ova and for the fact that diverticula were not present, while in *hispid*a they are very apparent as early as twenty-four hours after hatching.

7. *Spadella draco*.

Among the *S. flaccida* collected by Dr. Andrews at Bimini was a single specimen of this species. The cosmopolitan nature of certain of the Chætognaths is well illustrated by it. In his article on "Les Chætognathes de la Baie d'Amboine" (Malay Archipelago), E. Béraneck says:—"La *Spadella draco* est la plus commune des espèces de ce genre trouvées dans la pêche pélagique de la baie d'Amboine."

8. *Spadella schizoptera*.

This very unusual species was described in the 'Circular' for June 1895. It is another of the forms from the Bahamas.

9. *Sagitta hispid*a.

This form was described at the same time as the preceding. We have found it in Jamaica, at Beaufort, North Carolina, and at Bimini, in the Bahamas. Mr. A. Agassiz has found it elsewhere in the Bahamas, in the cruise of the 'Wild Duck' in 1893.

XXXIII.—*New Species of Pyralidæ &c. from the Khasia Hills.* By W. WARREN, M.A., F.E.S.

[Concluded from p. 177.]

ORTHOCONA, gen. nov.

Fore wings elongate; costa straight till shortly before apex; hind margin obliquely curved. Hind wings in female narrow,

in male broad and short, with shouldered costa; apex and hind margin rounded; inner margin largely developed. Antennæ lamellate (female); tongue and ocelli present; labial palpi large; second joint porrect, broad, curved beneath; third joint half as long as second, conical, erect in front of face, and articulated on to second, with a clear incision between them externally, as in *Agrotera*; maxillary palpi fine, porrect. Wings with hyaline discal mark in female.

Type *Orthocona eximialis*, Warr. (*Thysanodesma*).

Akin to *Agrotera*.

Since the description of *Thysanodesma eximialis* ♀ was written I have met with a pair in good condition, the female of which differs in certain particulars from the type formerly described; and as the male differs considerably from either, I append a fuller description.

Orthocona eximialis.

♀. Fore wings dark brown, with a strong violet lustre; the lines obscure; a large square white hyaline spot at end of cell, preceded and followed by a black spot; a smaller spot of the same character below it beneath the median; a yellow spot on costa above it, with a smaller yellow spot nearer base; first line visible only on the inner margin, the remainder lost in the dark basal patch; second line at three fourths, wavy to below middle, then incurved to touch the base of the discal spot, thence to inner margin in middle; the space included dark blackish brown, except a minute pale yellowish spot on median just beyond the discal spot; marginal area violet-brown; two yellow costal spots, one before, the other (larger) at apex; marginal line dark purple, preceded by a small yellow spot below apex and another above anal angle; fringe pale yellow, with a purplish apical and larger middle patch, these with a darker line along base. Hind wings with base dark; a central hyaline band containing the dark discal spot and a thick black line from the inner margin along its outer border; marginal area violet-brown, with a faint yellowish spot in the middle; fringe yellowish at apex and again before anal angle; the rest purple. Collar purple; face and thorax much varied with pale yellowish-white scales (abdomen wanting). Underside paler, more generally violet, with the yellowish places larger; both wings with a central pale yellowish hyaline fascia.

The male (of 24 millim. expanse), likewise from the Khasias, differs not only in size, as above indicated, but in markings, as follows:—The hyaline patches of the fore wings

and band of hind wings are wanting, being of the same violet-brown tint as the rest of the wings; but beyond the black discal mark of the fore wings is a bright white spot; the basal area is mixed with white scales; the yellowish costal spots are limited to a small one beyond the outer line and a similar small one at apex; the yellowish marginal spots of both wings are wanting; in the hind wings the outer line is as much excurved as in fore wings; on the underside the median area in both wings is paler, but does not form a distinct fascia.

Genus *METASIODES*, Meyr.

Metasiodes ? *apicalis*, sp. n.

Fore wings very long and narrow, pinkish fawn-colour, dusted thickly with very fine fuscous atoms; basal area suffused with cloudy fuscous; first line at one sixth, double, bent in middle, the lower arm vertical, closely followed by a subquadrate dark mark in the cell, and a smaller one below it; discal mark 8-shaped, with clear fuscous edges; second line at five sixths, fine, wavy, starting from a black costal spot; the median sinus outward approximates to the hind margin; a large oblong blackish blotch on hind margin below the apex, and a smaller squarish one above anal angle; a marginal row of blackish spots; fringes concolorous, with dark chequering. Hind wings like fore wings, without basal suffusion; an ocelloid discal spot and outer line as on fore wings, ending in a black blotch on inner margin; fringe as in fore wings. Head, thorax, and base of abdomen fawn-colour; face, collar, and rest of abdomen dark fuscous, the third segment black; base of anal segment black, with the anal tuft and end of preceding segment paler. Underside like upper.

Expanse of wings 24 millim.

Two males only from the Khasias.

The scaling of both wings is very fine and the wings themselves are semidiaphanous. I am by no means sure that this is a *Metasiodes*; the labial palpi are short, slightly upturned; the second joint hairy beneath, the third short, conical; maxillary palpi exceedingly minute; tongue well developed and ocelli distinct; antennæ of male simple, lamellate. The neurulation is quite simple, the third and fourth subcostals only being stalked from end of cell.

Superficially the insect bears a great resemblance to Walker's *molusalis*.

Genus METASIA, Guen.

Metasia? fuscalis, sp. n.

Fore wings tawny brown, without any clear markings; in the middle of wing are three yellowish contiguous spots, one above the other, very obscure, and edged with darker; fringe concolorous. Hind wings rather paler, with whitish costa. Head, thorax, and abdomen concolorous. Underside fuscous, the inner margin of fore wings whitish.

Expanse of wings 24 millim.

One female from Bombay.

I have left this species in *Metasia*, but it will probably have to form the type of a distinct genus.

Metasia sabulosalis, sp. n.

Fore wings bone-colour, dusted with pale brownish; a pale brownish subcostal streak to beyond cell; first line curved at one fourth, second at five sixths, straight, but slightly wavy, to first median, shortly bent in along it, then oblique to inner margin at two thirds; a small discal ocellus, marginal area with a brown subapical cloud; fringe concolorous, with a darker basal line. Hind wings paler, without brown dusting except along hind margin; a brown submarginal line forming a shallow sinus in the middle. Head, thorax, and abdomen all bone-colour. Underside duller, with the outer line and discal rings indicated.

Expanse of wings 14 millim.

Several from Poona.

Genus DANAGA, Wlk.

Danaga costipunctata, sp. n.

Fore wings dark purplish brown, the lines hardly darker, but slightly edged with paler; first near base, indicated by a paler spot on subcostal and above the inner margin; second at five sixths, bent outwards below costa, thence vertical and slightly bent to the hind margin above anal angle, running in to below the discal spot, thence to inner margin beyond middle, edged faintly with paler; a small yellowish spot in cell, a larger subquadrate one at the end, edged outwardly by a black discal mark, which also has a paler margin; four yellow costal spots, two before and two beyond the middle; another at the apex; fringe pale yellowish below apex and at anal angle, fuscous at apex and between; the inner half

throughout chequered with a series of fuscous spots. Hind wings brown, with the outer line faintly expressed and indicated by a pale spot on hind margin, where the elbow touches it, and on inner margin, where it ends; fringe brown, with darker line near base, whitish before anal angle. Head, thorax, and abdomen concolorous, base of abdomen with a yellowish ring. Underside with basal half of wings pale yellow, marginal half fuscous; costa of fore wings yellow, with fuscous patches.

Expanse of wings 17 millim.

Two males from the Khasias.

Genus EURRHYPARODES, Moore.

Eurrhyparodes confusalis, sp. n.

Fore wings yellow, with blotches and striæ, often confluent, of purple scales, overlaid with lustrous leaden scales; costa with seven or eight short thick strigæ, space between median and subcostal more or less filled with darker, including a square spot in the cell, followed by a discal ring; three other blotches are conspicuous, one below the costa obliquely above the discal mark, joined by two lines to another obliquely below it, and a third (the largest of all) on inner margin below the cell; hind marginal area with an agglomeration of small striæ; fringe yellow at apex and anal angle, purple between. Hind wings with a central curved line of blotches and the marginal area interruptedly filled with contiguous striæ; fringe yellow, varied with purple. Head, thorax, and abdomen yellow, much mixed with purple; the two basal segments of abdomen wholly yellow. Underside rather paler and duller.

Expanse of wings 19 millim.

One male from the Khasias.

The hind margin of hind wings is only slightly indented below the apex.

Genus BLEPHAROMASTIX, Warr.

Blepharomastix ? *delicata*, sp. n.

Fore wings narrow, elongate, pale bone-colour, with the marginal area and costa suffused with brownish flesh-colour; shortly before apex is a brown spot on costa, from which starts a slightly wavy dark line towards the anal angle, before which it becomes obsolete; a brown-black spot on hind margin below apex; fringe concolorous. Hind wings

and fringes white. Head, thorax, and abdomen ochreous; palpi dark brown above, white beneath. Underside whitish; the fore wings pinkish brown towards hind margin.

Expanse of wings 24 millim.

Two males from Onoribo.

The species is rather different from typical *Blepharomastix*, but I think it may be placed among them for the present.

LEUCOGEPHYRA, gen. nov.

Fore wings with costa nearly straight; apex produced; hind margin sinuous, bulged below the middle. Hind wings with apex bluntly produced, hind margin sinuous, forming a rounded bulge below middle. Labial palpi long, upcurved in front of face, the terminal joint short and aciculate; maxillary palpi filiform, horizontally porrect; tongue present; ocelli apparently absent; antennæ of male with close broad laminations, flattened and widened beyond the middle; hind tibiæ of male with four spurs.

Type *Leucogephyra semifascialis*, Warr.

Leucogephyra semifascialis, sp. n.

Fore wings pearly white, with a minute black dot at base of inner margin; a dark brown transverse line at one third, curved outwards in its upper half, then vertical and thicker; a small brown-black dot at lower end of discocellular; an exterior brown-black line formed of interrupted dashes between the veins from costa at four fifths, slightly curved outwards in upper half, then elbowed inwards and from below the cell-dot running obliquely inwards to inner margin; an oval red-brown blotch on middle of hind margin running obliquely through the fringes, which are white, with a very fine and delicate brown basal line. Hind wings pearly white, with a short basal line from inner margin; a broad black-brown fascia from inner margin above anal angle, mixed with white scales towards middle, and becoming ferruginous in middle of wing, where it ends abruptly, its edges being continued as divergent dark lines to the costa; fringe white, with fine basal line and two or three dark specks in the central bulge and at anal angle. Underside white, with the lines all marked, but the blotch of fore wings and fascia of hind wings greatly reduced. Head, face, thorax, and abdomen white, the latter with a broad black ring corresponding to the dark fascia of the hind wings; palpi with blackish scales externally; base of antennæ inside with a few black scales.

Expanse of wings 16 millim.

One male from the Khasias.

Subfamily *HYDROCAMPINÆ*.Genus *NYMPHULA*, Schrank.*Nymphula latifascialis*, sp. n.

Fore wings ochreous grey, with dull brown suffusion; the lines just paler, palest on the costa; first line at one third, sharply angled below costa, then oblique inwards, preceded by a dark brown shade; second line from costa at three fourths, sinuous and parallel to hind margin to first median, where it is sharply elbowed, then parallel to inner margin for a short space, and again parallel to hind margin to inner margin beyond middle; it is followed by a brown shade with irregular outward margin; space between the two lines on lower half of wing dark brown, connected with a dark brown central costal cloud; a concise marginal brown band, with dark dashes on the veins; fringe dark grey, with broad black basal line and whitish patches below apex and above anal angle. Hind wings grey, with a broad pale-margined central fascia, the edges of which are wavy, and a narrower one nearer the base; marginal band and fringes as in fore wings. Thorax brown; basal segment of abdomen pale, following segments brown; apical half ochreous; face paler; palpi dark brown. Underside glossy grey, with all the markings indistinct.

Expanse of wings 26 millim.

A male and female from the Khasias.

The female has a brown suffusion all over the fore wings, rendering the markings very obscure, and the whole insect darker than in the male.

Nymphula nigra, sp. n.

Fore wings blackish slate-colour, the markings paler but more or less indistinct; some obscure pale marks near base; outer line from beyond three fourths, a little indented below costa, then forming a semicircular curve to below the discocellular; centre of the wing occupied by a pale flattened 8-shaped mark, contiguous above to a smaller costal mark and below to a larger flattened oval one on inner margin; a pale curved shade before hind margin; fringe concolorous with a darker basal line. Hind wings dark grey. Head and thorax concolorous with fore wings; abdomen paler, more cinereous. Underside of fore wings uniform dark grey, of hind wings light grey.

Expanse of wings 20 millim.

Several of both sexes from the Khasias.

Genus OLIGOSTIGMA, Guen.

Oligostigma albidivisa, sp. n.

Closely allied to *O. hapilista*, Swinhoe, but with the markings less concise; in the fore wings the submarginal yellow band, instead of being of uniform width, with neat edges, and separated from the marginal band by a uniformly wide white space, is broader, diffusely edged externally with fuscous, and swelling out below the middle so as sometimes to touch the marginal band. In the hind wings, instead of the broad orange border with a single black line down the centre, there are two orange fasciæ separated by a narrow white space.

Expanse of wings 30 millim.

Several from the Khasias.

GETHOSYNE, gen. nov.

Fore wings with costa straight for two thirds, then strongly arched; apex blunt, rectangular; hind margin strongly bent at middle, the upper half vertical, the lower very oblique. Hind wings narrow, the hind margin as in fore wings, strongly bent opposite the cell. Labial palpi obliquely upcurved; the second joint thick, hairy beneath, the third short, with blunt apex; maxillary palpi filiform; tongue and ocelli present; antennæ lamellate, subdentate, and pubescent. Neuration: fore wings, cell half the length of wing; first median shortly before end of cell, second from the end, third and lower radial from the end of the discocellular; upper radial from below upper end of cell; last subcostal from the end, which is bent down; third and fourth stalked, with the second very closely approximated in male; in female the second anastomoses near its origin with the stalk of the other two, and runs halfway before separating. In the hind wings the first subcostal anastomoses with costal almost immediately; medians and radial as in fore wings.

Type *Gethosyne æquivocalis*, sp. n.

Gethosyne æquivocalis, sp. n.

♀. Fore wings ochreous white, with the basal three fourths almost wholly suffused with deep brown; the costa yellowish; an oblong white discal spot, edged with deeper brown, preceded in the cell by two small yellowish spots; another yellow spot in middle of base and two more near inner margin; exterior line at three fourths, thick, deep brown, forming two

irregular outward curves, then slightly incurved to inner margin, its lower course hardly discernible in the dark suffusion; this is followed by a twice curved fulvous line, which below the middle becomes darker and forms the outer edge of the dark suffusion; opposite the cell and below the elbow it is joined by a horizontal streak to the marginal line, which is very thick, deep brown, and running in along costa to the origin of the last line; the space beyond the last line is pure white; the rest of the paler portion of the wing is yellowish; fringe yellowish, chequered with brown. Hind wings like fore wings, the basal area only brownish, the two lines much more sinuous, the inner preceded by five or six oval yellow spots. Head, thorax, and abdomen deep brown, the last with the basal segments spotted with yellowish. Underside dull brownish, with the margins paler; cell-spot of fore wings large and pale, of the hind wings dark; the two outer lines both marked.

The male is much darker, being nearly wholly suffused with dark brown-black, leaving only the costa and spaces along the hind margin dull orange.

Expanse of wings, ♀ 24, ♂ 20 millim.

A few from the Khasias.

Genus *AMBIA*, Wlk.

Ambia complicata, sp. n.

Fore wings white, mostly suffused with blackish; costal region beyond the first line broadly yellow; antemedian line at one third, broadly angled in mid-wing, whitish, with a black edge; the basal area within it blackish, with traces of a pale subbasal line; postmedian line at two thirds, oblique outwards to opposite the cell, round which it forms a broad curve, which is slightly indented in middle, to beneath the discal spot, thence sinuous to inner margin beyond middle, white, edged with black; discal spot white, followed by a blacker patch in the dark suffusion; a dark spot on costa halfway between the two lines; in the yellow apical region is a small white subcostal blotch with black outward edging; a similar one on hind margin below apex and another above anal angle; fringe whitish, with a dark line near base. Hind wings with inner half white, the outer blackish; two curved white, thickly black-edged lines, one before, the other beyond the middle; traces of a pale submarginal line; hind margin yellow-tinged; fringe as in fore wings. Thorax and abdomen grey; face and palpi ochreous. Underside of fore

wings dark grey, with apex yellow; a pale narrow spot on costa at middle; outer line and cell-spot white. Hind wings whitish, tinged with yellow, and more fuscous towards costa.

Expanse of wings 12 millim.

One female from the Khasias.

Genus CYMORIZA, Guen.

Cymoriza albiflavidalis, sp. n.

Fore wings bright yellow; first line formed by two white spots below costa and a broad, oblique, silvery white streak to inner margin; this line is preceded by a smaller, less distinct, but similar basal line; outer line silvery white, interrupted below middle, its lower end marked by a broad horizontal blotch; the costal portion is preceded by two horizontal white streaks, the lower of which touches the white cell-spot; the yellow marginal band is preceded by a narrower silvery white one, which is curved round above the anal angle, so as to coalesce with the lower end of the outer white line; the white and yellow portions are all more or less distinctly edged with fuscous; the costal swelling also is fuscous. Hind wings with a narrow yellow band near base, a broad fuscous-edged central band swollen towards costa and containing a long black cell-spot, and the two outer bands as in fore wings. Head, thorax, and abdomen yellow, spotted with white. Underside like upper.

Expanse of wings 22 millim.

Two males from the Khasias.

Cymoriza fascialis, sp. n.

Fore wings olive-fuscous, dusted with dark grey scales; the lines white; first line double, curved and sinuous; outer line curved, parallel to hind margin, constricted below the centre, and preceded opposite the cell by a short whitish dash; submarginal line similar, but not reaching the inner margin; a marginal olive band, coalescing before the anal angle with the dark band between the two outer white lines; cell-spot black; the central area is the most darkened by dark grey scales. Hind wings like fore wings, the two white basal lines with their intervening olive central space occupying the base of the wing; central area still darker than in fore wings, with a black cell-spot on its inner edge. Abdomen olive-fuscous; head, thorax, and basal segments of abdomen fuscous, much mixed with whitish scales. Underside like

upper, but generally darker; the hind wings with a deep fuscous spot near base.

Expanse of wings 21 millim.

Several from the Khasias.

Cymoriza fulvalis, sp. n.

Fore wings orange-fulvous, dusted with fuscous in the spaces between the veins; first line silvery white, indicated by a spot on costa and inner margin and two or three smaller ones between, surrounded by fuscous scales; two whitish spots surrounded with fuscous in the basal area; cell-spot white, edged with black, with a horizontal white mark above it, nearer the base in the male than in the female; outer line consisting of a broad white vertical blotch from costa, the inner edge of which is incurved in middle, and a white horizontal blotch above the submedian vein before the anal angle, with a small white dash obliquely above it (in the male there are two); the white costal blotch is preceded by a horizontal streak opposite the cell, and in the male by another below the costa; a broad orange marginal band from apex to the end of the white blotch before anal angle, separated from another submarginal similar band with fuscous edges by a row of white spots between the veins, the spots in the middle more or less obliterated by dark fuscous scales; on the outside of the outer band is a row of small blackish triangles; fringes with black basal line. Hind wings the same, with the discal spot larger. Thorax and abdomen fulvous, mixed with fuscous, the abdomen with white dorsal spots; head whitish ochreous; face silvery white; palpi with second joint dark fuscous, terminal joint white. Underside like upper, but somewhat duller.

Expanse of wings, ♂ 26, ♀ 30 millim.

A few from the Khasias.

Cymoriza interruptalis, sp. n.

Fore wings brown-black; lines silvery white, first at one third, indicated by a spot on costa and inner margin and one or two between them; cell-spot white, minute, edged with black; outer line represented by a white vertical line from costa shortly before apex, and a horizontal line on the submedian fold before the anal angle, with a dull orange smear beneath it; a broad orange marginal band, much suffused and chequered with dark scales, edged inwardly by a thick black line, which is preceded by a row of triangular white spots; fringes short, with a black basal line. Hind wings

the same, but the extreme base orange; the white submarginal line interrupted in the middle of wing. Head, thorax, and abdomen brown-black. Underside like upper, but duller.

Expanse of wings 26 millim.

A pair from the Khasias.

Genus *SUFETULA*, Wlk.

Sufetula nana, sp. n.

Fore wings pale grey, towards the base dusted with blackish scales; first line at one third, blackish, angled outwards below the middle; basal area with four or five minute pale dots with dark edges; second line close to and parallel to hind margin, blackish, preceded above the inner margin by another short line; marginal space slightly darker, with a black dash across it below the sinus; costa before apex with three or four pale dark-centred semiannuli; a rather large dark cell-spot; marginal line blackish; fringe grey. Hind wings whitish, with faint traces of a submarginal line and with a blackish blotch above the anal angle. Head, thorax, and abdomen grey; hinder half of abdomen blackish (? natural). Underside pale, with the markings faint.

Expanse of wings 11 millim.

One male from Bombay.

Subfamily *GALLERIINÆ*.

EMBRYOGLOSSA, gen. nov.

♀. Fore wings elongate; costa arched at base and faintly curved towards apex, which is blunt; hind margin evenly curved; inner margin convex and scaled. Hind wings longer than broad, the inner margin short, hind margin slightly curved. Abdomen thick, reaching beyond hind wings; the anal segment squared; antennæ (♀) subserrate, ciliated, the basal joint thickened, with a tuft of hair on the inner side projecting in front of face; tongue aborted, consisting only of two short curled scaly processes; maxillary palpi absent; ocelli present; labial palpi long, porrect, pointed, the second joint with short scales, the third naked. Neuration: fore wings, cell half as long as wing; first median at four fifths, second a little before lower angle of cell, third from the angle, lower radial just above, upper radial from upper angle; first two subcostals free, last three stalked, the third and fourth shortly stalked from the fifth. Hind wings with costal free, the subcostals short-stalked;

lower arm of discocellular very oblique; first median at one half; the others as in fore wings.

The male is considerably smaller than the female. The abdomen has the anal tuft strongly developed and a tuft of hairs at base of costa beneath; antennæ ciliated, with the basal joint very long, slightly curved outwards, with a tuft on the inner side towards its apex, the shaft articulated at an angle. In both wings the third median and the radial are on a short stalk and in the hind wings the first median is at four fifths, as in fore wings.

Type *Embryoglossa variegata*, sp. n.

Embryoglossa variegata, sp. n.

♀. Fore wings dull green, much suffused with blackish, and with red scales intermixed; basal area blackish, ill-defined, bounded by a paler line, which is only distinct towards inner margin; a large black cell-spot; outer line from three-fourths of costa, running out towards hind margin, strongly denticulated in middle, incurved below middle, and edged in its lower portion with whitish scales; a blackish suffusion from apex to first median extends below costa nearly to discal spot, and between the median and submedian is continued, mixed with reddish scales, to join the projection of the basal patch; costa before apex with black dashes, separated by paler; a larger reddish-white spot before apex; anal angle with a tawny and red elongated blotch; veins beyond the middle blackish; marginal line distinct, black, with white dots at the ends of the veins; fringe dark at apex, reddish with black mottlings in middle, and altogether reddish at anal angle. Hind wings shining, fuscous grey, with traces of a pale curved and denticulated postmedian line, with a more distinct whitish denticulation on the first median; fringe reddish ochreous, marginal line indistinct, but the whitish dots at end of veins plain. Head, face, and front of thorax rufous; thorax and abdomen with mixed green, fuscous, and ochreous scales; the base of patagia dark fuscous. Under-side dark glossy grey, with a pale curved outer line on both wings; apex of fore wings pale ochreous, with red scales intermixed.

Expanse of wings 50 millim.

In the male, which is much smaller, the basal and marginal areas of fore wings are paler and the central area darker; the discal spot is large and pale, with a narrow dark centre.

Expanse of wings 34 millim.

A few from the Khasias.

Family Thyrididæ.

Genus STRIGLINA, Guen.

Striglina duplicifimbria, sp. n.

Fore wings reddish ochreous, with blackish reticulations and spots; the costa fuscous tinged, darker towards base; an elongated rounded black spot at end of cell and a square black spot below it above inner margin; four round black spots towards hind margin, the lower pair nearer the margin than the upper; the whole wing with interrupted, and sometimes interlacing, black strigulæ in more or less vertical rows; fringe brown-red, very broad, with a black line down the middle and traces of dark scales beyond it. Hind wings rather paler; a black streak near base; a blackish spot at end of cell and another below it near inner margin; five or six round black spots towards apex, the innermost the largest, and one spot towards anal angle; fringe as in fore wings. Head, thorax, and abdomen reddish ochreous. Underside paler, with all the spots more distinct.

Expanse of wings 32 millim.

Several of both sexes from the Khasias.

Distinguished not only by the very broad fringe, but by the subfalcate fore wings and bowed hind margin.

Genus BANISIA, Wlk.

Banisia dissimulans, sp. n.

Fore wings dull grey-brown or fawn-colour, with darker markings; three darker vertical fasciæ, two antemedian, the third postmedian and curved outward in the upper half of wing; a fourth curved fascia not darker than the ground-colour, with the edges parallel to the hind margin of the third fascia, and starting from oblique *y*'s on the costa, the pale spaces between the fasciæ with a dark crinkly line down the middle, the whole surface thickly covered with transverse striæ and reticulations. Hind wings with the fasciæ only outlined, covered with a network of interlacing contorted striæ; fringes of both wings darker. Thorax dark fawn; head and abdomen paler. Underside redder and brighter.

Expanse of wings 40-50 millim.

A large number from the Khasias.

There is a specimen in the British Museum collection from Sylhet. Duller and greyer than *Pharambara reticulata*, Moore; in the character of the markings more resembling *B. tetragonata*, Wlk.

Banisia ordinaria, sp. n.

Fore wings dull brownish drab, with darker shading and reticulations; a basal patch, a narrow antemedian fascia, nearly vertical, and a postmedian fascia, forked below the middle and becoming obsolete towards inner margin, its outer edge angulated in mid-wing, all slightly darker; the whole wing covered with dark, more or less interlacing strigulae; fringe concolorous, darker towards the apices, and faintly chequered with darker. Hind wings with a dark line near base and a dark irregular central fascia, the whole wing reticulated; fringe as in fore wings. Head, thorax, and abdomen concolorous; collar and front of thorax darker. Underside brighter, more fulvous, with the fasciae dull orange.

Expanse of wings 34 millim.

One female from Mackay, Queensland.

There are three examples unnamed in the British Museum collection from Borneo which appear to be identical with the present insect. It is most nearly allied to *Banisia tetragonata*, Wlk., and *B. dissimulans*, Warr.

BEGUMA, gen. nov.

Fore wings with costa nearly straight, convex before apex; apex rounded; hind margin well curved. Hind wings with hind margin rounded; inner margin short; anal angle rounded off. Antennae (♀) thick, closely lamellate; palpi perfect, the second joint slightly hairy beneath and curved, the third minute, pointed; tongue feeble. Neuration: fore wings, cell half as long as wing; discocellular apparently interrupted. First median from two thirds, second just before lower angle, third from the end; lower radial from a little above the angle, upper radial from above the middle of discocellular; last subcostal from below the upper angle, third and fourth stalked from the angle, second just before the end, first from one half; from the base of the last subcostal a veinlet runs basewards to the subcostal at about three fourths. Hind wings: costal free; first subcostal from well before the end of cell, second from the end; medians and radial as in fore wing; the discocellular is strong, complete, and angulated; scaling dense.

Type *Beguma constellata*, sp. n.

Beguma constellata, sp. n.

Fore wings dull rosy, deepening towards the base, and there black-brown, fading towards the hind margin to pearly grey,

the veins, however, remaining rosy; the costa pearly grey from near base; fringes grey. Hind wings the same, bright rosy from base of inner margin. Head, face, and palpi rosy brown; thorax black-brown; abdomen dull rosy grey. Underside rosy, with a fulvous tinge, the fore wings black-brown at base; rows of spots of raised silvery lilac scales radiating outwards from the base along the intervals between the veins, becoming fainter beyond the middle.

Expanse of wings 50 millim.

One female from the Khasias.

The only example is somewhat worn; it is probable that when fresh the rosy tint above extends to the hind margin and the silver spots below are more abundant.

Genus PHARAMBARA, Wlk.

Pharambara curvilinea, sp. n.

Fore wings pearly grey, suffused with pale coppery, and below the middle with a bronzy-grey tinge; the reticulations and lines dark brownish; a narrow angulated subbasal fascia, a nearly vertical antemedian, and a broader outwardly curved postmedian fascia coppery; the intervening spaces on the costa pale grey; beyond the postmedian fascia is a whitish-grey blotch on the costa, followed by a dark brown almost semicircular line from costa to below middle, thence obliquely to inner margin before anal angle; the whole wing covered with rather obscure dark grey, and, towards hind margin, dark brown reticulations and streaks; fringe coppery, with a broad dark central line. Hind wings with three dark brown lines parallel to one another and at equal distances, the median followed by a greyish shade, the postmedian by darker reticulations. Head, thorax, and abdomen concolorous. Underside brighter; fore wings with a bright chestnut subcostal streak, broader at apex; some black and white longitudinal scales beneath it; the lines and reticulations of both wings distinct, dark brown.

Expanse of wings 26 millim.

One male from the Khasias.

Pharambara fallax, sp. n.

Fore wings mouse-colour, suffused and strigulated with darker; some irregular dark greyish-black spots along the hind marginal area; fringe darker; in certain lights a broad basal and a narrower median and postmedian fascia can be seen, slightly darker than the rest of the wing. Hind wings paler. Head, thorax, and abdomen dark mouse-colour;

basal segments of the latter a little paler. Underside pale ochreous; the costa of fore wings neatly marked with vertical black strigæ; a velvety black discal blotch, with orange markings in the middle and long yellowish streaks and scales above and below them; a bright chestnut stripe below costa from middle to apex; a vertical chestnut fascia from inner margin beyond middle to a dull blackish subcostal spot; a broader chestnut fascia from before anal angle to near costa, thence bent obliquely to middle of hind margin. Hind wings with indications of chestnut fasciæ towards apex and hind margin.

In the female the velvety black discal blotch is much reduced and the subcostal stripe is continued to the base.

Expanse of wings 24 millim.

Several from Biak and Humboldt Bay, New Guinea.

Family Epiplemidæ.

Genus DIRADES, Moore.

Dirades? ambigua, sp. n.

Fore wings greyish fawn-colour, slightly dusted with dark atoms; the lines ferruginous, first from costa at one third to middle of inner margin, strongly curved outwards in the middle, second at two thirds, also curved outwards to the middle, then inbent, and reaching the inner margin at three fourths; the space included between the lines slightly darker than the rest of the wing; a ferruginous triangular blotch on hind margin opposite the cell, with three black spots along its inner edge, often confluent, and a minute isolated black dot above it; fringe chequered pale ochreous and dark grey, with a rather broad dark grey basal line. Hind wings like fore wings, with two isolated black submarginal dots, one near the base of each tail. Head, thorax, and abdomen concolorous with wings; face dark brown. Underside pale grey, with darker frecklings; the hind wings paler than the fore wings, with the second black dot expressed.

Expanse of wings, ♂ 20, ♀ 24 millim.

Several from the Khasia Hills.

The male is paler throughout than the female, and the first line appears to start from the costa further from the base. There is no trace in the hind wings of the male of any tuft of hair or distortion of the veins on the inner margin; in the fore wings the apex is bluntly rounded; the hind margin oblique and faintly excised opposite the cell; in both sexes

the hind wings are tailed at veins 4 and 7, and the costa excised in middle, with a fringe of hairs on each side of the excision.

Genus EPIPLEMA, H.-S.

Epiplema castanea, sp. n.

Fore wings fawn-grey, freckled with blackish; the median area filled up with chestnut-brown; first line from costa at one fourth to inner margin at one third, black-brown and distinct, bluntly angled on the subcostal and median nervures; second from costa beyond middle to inner margin at three fourths, angled outwards on the subcostal, inwards on the radial, with a blunt prominence on veins 3 and 4 and another on the submedian above the inner margin; marginal third clouded in places with darker, especially above anal angle; a brown-black curved marginal line along the subapical excision. Hind wings the same, but the chestnut shade of the median area extends also over the marginal area except at the anal angle and along the inner margin, which remain, like the basal area, clear grey; fringes concolorous. Head, thorax, and abdomen grey; face and palpi darker. Under-side grey, freckled with black; the fore wings darker than the hind ones; the single female is paler throughout than the male.

Expanse of wings 26 millim.

Both sexes from the Khasias.

The fore wings have the hind margin deeply excised from vein 7 to 3, slightly excised again between 3 and 2 and 2 and the anal angle; the hind wings have the hind margin tailed at vein 7, with a small tooth at veins 6 and 4. The neuuration of the hind wings is abnormal; the discocellular and radial are absent; the inner marginal area is restricted, the inner margin itself being in the male folded over; there is a bed of dark scales towards the base beneath the median nervure and a long tuft of pale ochreous hairs from the base of the wing; veins 2, 3, and 4 are visible in the female, but vein 2 is either absent or hidden by the fold in the male. In both sexes the costa of hind wings is excised in middle, with a strong tuft of hairs along it on either side of the excision.

Epiplema flavigutta, sp. n.

Fore wings very much as in *E. moza*, Butler, but the three dark submarginal specks are more or less confluent and form a dark brown crescent. In the hind wings, instead of the

grey lunules with white lines there are two yellow confluent blotches between the tails (the lower one edged below with black), and before the lower tail a small black dot. The hind margin of the fore wings is excised from the apex to vein 4, and the hind wings are tailed at veins 7 and 4.

Expanse of wings 26 millim.

Both sexes from the Khasias.

Like *E. moza* this species occurs of two sizes, the larger form reaching 32 or 34 millim.

XXXIV.—*Descriptions of Four new Lizards from Roebuck Bay, N.W. Australia, obtained by Dr. Dahl for the Christiania Museum.* By G. A. BOULENGER, F.R.S.

Diplodactylus stenodactylus.

Head very convex; snout rounded, as long as the distance between the eye and the ear-opening, slightly longer than the diameter of the orbit; ear-opening small, round. Body and limbs rather stout. Digits cylindrical, not dilated at the ends, covered above and below with small granular scales; apical shields small, longer than broad. Body and limbs uniformly granulate above and below. Granules on the snout a little larger than those on the back of the head; rostral twice as broad as deep, with median cleft above; nostril pierced between the first labial, a large internasal, which is in contact with its fellow, and four granules; ten upper and as many lower labials; symphysial trapezoid; no chin-shields, but enlarged flat granules gradually passing into the minute granules of the throat. Male with three præanal pores on each side and a conical tubercle on each side of the base of the tail. Pale brownish above, with a light, brown-edged vertebral stripe bifurcating on the neck, passing through the eyes, its branches meeting again on the end of the snout; the brown dotted with lighter; lower parts white.

	millim.
From snout to vent.....	45
Head.....	12
Width of head.....	8
Fore limb.....	14
Hind limb	19

This new species, described from a single male specimen without tail, is allied to and appears to connect *Diplodactylus*