

STUDIES IN AUSTRALIAN LEPIDOPTERA.

BY A. JEFFERIS TURNER, M.D., F.E.S.

(Read before the Royal Society of Queensland, 26th April, 1915.)

Family ARCTIADÆ.

Subfamily Nolinæ.

PISARA HYALOSPILA.

ὕαλοσπιλος, with transparent spot.

Pisara hyalospila, Hmps. Cat. Lep. Phal., Suppl. i., p. 389.

♂ ♀ 18-20 mm. Head white. Palpi 3; pale brownish. Antennæ grey; basal joint white; ciliations in ♂ 2. Thorax brown mixed with whitish. Abdomen whitish; a strong basal dorsal crest pale brown. Legs whitish with some fuscous irroration; anterior femora and tibiæ fuscous; anterior and middle tarsi fuscous with white annulations. Forewings suboblong, costa rather strongly arched, apex rounded, termen obliquely rounded; in ♂ with a square hyaline fovea at $\frac{1}{3}$ with transversely striated base and visible on both upper and lower surfaces; white; basal third fuscous brown with a darker outwardly curved transverse line from $\frac{1}{3}$ costa to $\frac{1}{4}$ dorsum; fovea preceded and followed by a raised tuft of scales; a fine interrupted dark fuscous line from $\frac{3}{5}$ costa to mid-dorsum, curved outwards in disc; a thick dark fuscous line from costa before apex to tornus, straight but with a posterior dentation above tornus; a fuscous terminal line; cilia white with some fuscous irroration. Hindwings with termen rounded grey-whitish, towards base whitish; cilia whitish.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns, in June and October.

Q Brisbane. Three specimens.

CELAMA THYRIDOTA.

θυριδοτος, windowed.

Celama thyridota, Hmps. Cat. Lep. Phal., Suppl. i., p. 390.

14-16 mm. Head white. Palpi $2\frac{1}{2}$; white external surface suffused with pale fuscous. Antennæ white; in ♂ finely pectinated. Thorax white with some pale fuscous suffusion. Abdomen grey-whitish, apices of segments white. Legs white, with some fuscous irroration; tarsi fuscous annulated with white. Forewings triangular, costa nearly straight to beyond middle, then rather abruptly bowed, apex rounded, termen obliquely rounded; in ♂ with a large oval hyaline fovea in costal and posterior part of cell, and a second narrower similar fovea between bases of veins 6 and 7; white with some fuscous and brownish irroration; three raised tufts on costa, fuscous-brownish; first near base; second at $\frac{1}{4}$, its apex rounded, expanded, dark-fuscous, preceding first fovea; third shorter, its rounded apex lying between the two foveæ; a dark-fuscous dot beneath second tuft; a fine dark fuscous transverse line at $\frac{3}{4}$, with slight outward projections in middle and above dorsum; an irregularly dentate pale fuscous subterminal line, with subcostal and median projections; an interrupted pale fuscous terminal line; cilia white with greyish specks. Hindwings with termen rounded; grey-whitish; cilia grey-whitish.

Exactly like *C. bifascialis*, Wlk., which is found in the same localities, except for the ♂ foveæ. The only difference I can detect in the ♀ is in the shape of the forewings, but this may not be trustworthy.

Type in Coll. Turner.

N.Q., Townsville, in May (♂ type); Q., Brisbane (1 ♀).

NOLA LECHRIOPA.

λεχιωπος, oblique-looking.

Nola lechriopa, Hmps. Cat. Lep. Phal., Suppl. i., p. 418; Pl. 24, f. 10.

♂ ♀ 16-18 mm. Head white, irrorated with grey. Palpi 3; grey. Antennæ grey-whitish; in ♂ with

moderately long ciliations (2). Thorax grey, with slight fuscous irroration. Abdomen pale grey. Legs whitish, with fuscous irroration; anterior pair fuscous; all tarsi fuscous with whitish annulations. Forewings elongate-triangular, costa moderately arched, more strongly towards apex, apex rounded, termen obliquely rounded; grey, with slight fuscous and whitish irroration: three small tufts of raised scales beneath costa, near base, at $\frac{2}{6}$, and middle, fuscous; a slender fuscous line, internally oblique, from second tuft, bent outwards and dentate near dorsum, ending on $\frac{1}{3}$ dorsum; a dark fuscous finely dentate line from $\frac{2}{3}$ costa, at first outwards, then strongly sinuate and very obliquely inwards, bent outwards again beneath middle of disc and ending on dorsum at $\frac{2}{3}$, its posterior edge suffusedly grey-whitish; a faintly darker dentate subterminal line; also edged posteriorly with grey-whitish; some obscure dark terminal dots; cilia grey, with whitish specks. Hindwings rather elongate, termen gently rounded; pale grey; cilia pale grey.

Type in Coll. Turner.

Q., Brisbane, in July and September; Stradbroke Island, in September; four specimens.

NOLA ZAPLETHES.

ζαπληθης, of full size.

Nola zaplethes, Hmps. Cat. Lep. Phal, Suppl. i., p. 418.
Pl. 24; f. 9.

♀ 28 mm. Head white; face irrorated with pale brownish-fuscous. Palpi 2; pale brownish-fuscous, basal joint dark fuscous. Antennæ grey-whitish. Thorax whitish, tegulæ pale brownish-fuscous. Abdomen whitish. Legs whitish; tarsi fuscous, with whitish annulations; anterior coxæ fuscous. Forewings suboblong, costa strongly arched at base, then straight (apex broken), termen obliquely rounded; whitish; a broad pale fuscous streak from base along costa to $\frac{1}{6}$; a dark fuscous ring on costa at $\frac{2}{5}$; a pale fuscous suffusion on costal half of disc containing crests of raised scales at $\frac{1}{3}$ and middle; a curved dark fuscous line from $\frac{3}{4}$ costa towards midtermen, then bent parallel to termen

not reaching tornus ; cilia whitish. Hindwings with termen rounded ; grey-whitish ; cilia grey-whitish.

Type (damaged) in Coll. Turner.

Q., Mount Tambourine, in November ; one specimen. The locality given by Hampson is incorrect.

NOLA PHLÆOPHILA.

φλοιοφιλος, bark-loving.

Nola phlæophila, Hmps. Cat. Lep. Phal., Suppl. i., p. 419. Pl. 24 ; f. 11.

♂ ♀ 22-24 mm. Head white, with a few dark fuscous scales. Palpi 3 ; whitish, towards base dark-fuscous, in ♀ mostly dark-fuscous. Antennæ grey-whitish, towards base white ; ciliations in ♂ 2. Abdomen pale fuscous ochreous-tinged ; tuft whitish-ochreous. Legs fuscous ; posterior pair ochreous-whitish. Forewings suboval, costa strongly and uniformly arched, apex round-pointed, termen obliquely rounded ; whitish with fuscous irroration ; markings dark-fuscous ; a short broad streak from base of costa ending in a raised tuft ; a fine line from $\frac{1}{4}$ costa obliquely outwards to a raised tuft, there sharply angled, again angled outwards, then curved to $\frac{1}{4}$ dorsum ; a third tuft beneath mid-costa connected by a subcostal streak with second tuft ; a second line from midcosta very obliquely outwards, then curved and continued by interrupted dots to mid-dorsum ; some fine streaks on veins in subterminal area, with some whitish streaks succeeding them, and in ♀ a series of short streaks running into termen ; cilia grey barred with whitish, apices whitish. Hindwings with termen rounded ; grey ; cilia pale grey.

Type in Coll. Turner.

Q., Brisbane, in July and August ; three specimens on tree trunks.

NOLA BELOTYPÆ.

βελοτυπος, marked with a dart.

Nola belotypa, Hmps., Cat. Lep. Phal. Suppl. i., p. 421, Pl. 24, f. 15.

♂ ♀ 21-22 mm. Head white ; in ♀ grey. Palpi 5 ; grey, internal surface whitish. Antennæ pale grey, towards

base whitish; ciliations in ♂ 2. Thorax grey, anteriorly in ♂ white. Abdomen grey-whitish. Legs fuscous; posterior pair whitish. Forewings elongate-triangular, costagently arched, apex round-pointed, termen obliquely rounded; whitish suffused with pale brownish-fuscous; markings dark-fuscous; a subcostal streak from base of costa to middle, gradually attenuating, with a raised tuft at $\frac{1}{3}$ of disc and at termination; a very oblique sharply and finely dentate line from $\frac{3}{4}$ costa to mid-dorsum, succeeded by a whitish shade; cilia grey irrorated with whitish. Hindwings with termen rounded; pale grey, cilia pale grey.

Type in Coll. Turner.

N.S.W., Ebor in January; Mount Victoria, near Katoomba, in February; two specimens. The locality given by Hampson is incorrect.

Subfamily Lithosianæ.

GRAPHOSIA STENOPEPLA.

στενοπεπλος, narrow-robed.

Graphosia stenopepla, Hmps., Cat. Lep. Phal. Suppl. i, p. 444, Pl. 25, f. 12.

♂ ♀ 24-26 mm. Head, palpi, and thorax pale ochreous. Antennæ pale-ochreous; in ♂ with short ciliations ($\frac{1}{3}$), and longer bristles (1). Abdomen and legs whitish-ochreous. Forewings narrow-elongate; costagently arched towards apex, apex rounded-rectangular, termen obliquely rounded; whitish-ochreous irrorated with fuscous, more so towards termen; a fuscous fascia from $\frac{2}{3}$ costa to mid-dorsum, interrupted beneath costa, its anterior edge straight, posterior edge sharply dentate, in ♀ obsolescent; cilia whitish-ochreous. Hindwings elongate-ovate, termen rounded; whitish-ochreous; cilia whitish-ochreous.

Type in Coll. Turner.

N.Q., Atherton; Q., Mount Tambourine, in November. Two specimens. The locality given by Hampson is incorrect.

SCOLIACMA XUTHOPIS.

ξουθωπις, tawny.

Scoliacma xuthopis, Hmps., Cat. Lep. Phal. Suppl. i, p. 461, Pl. 25, f. 22.

♀ 24 mm. Head, palpi, antennæ, and thorax brownish-ochreous. Abdomen grey, tuft brownish-ochreous. Legs brownish-ochreous. Forewings elongate, posteriorly dilated, costa evenly arched, apex rounded, termen obliquely rounded; brownish-ochreous; a faint interrupted fuscous line from $\frac{2}{3}$ dorsum towards $\frac{3}{4}$ costa; cilia brownish-ochreous. Hindwings with termen sinuate beneath apex, then rounded; pale ochreous; cilia pale ochreous.

Type in Coll. Turner.

W.A., Albany, in January. One specimen.

LEPISTA PULVEREA.

Pulvereus, dusty.

Lepista pulverea, Hmps., Cat. Lep. Phal. Suppl. i., p. 462.

♀ 23-24 mm. Head, palpi, and thorax brownish. Antennæ brownish; in ♀ with short ciliations ($\frac{1}{3}$) and longer bristles (1). Abdomen brownish-grey. Legs pale brownish. Forewings narrow-elongate, costa evenly arched, apex rounded, termen obliquely rounded; whitish-ochreous unevenly irrorated with pale-fuscous, which sometimes forms a streak along fold, and a median streak beyond middle; cilia whitish-ochreous. Hindwings broadly ovate, termen rounded; pale ochreous; cilia pale ochreous.

Type in Coll. Turner.

Q., Burpengary, near Brisbane, in April; Stradbroke Island, in April; Coolangatta, in March; three specimens.

POLIOSIA ZETESIMA, *n. sp.*

ζητησιμος, to be searched out.

Poliosia zatesima (misprint), Hmps., Cat. Lep. Phal. Suppl. i., p. 463, Pl. 25, f. 26.

♂ 12 mm. Head ochreous-grey-whitish; face grey. Palpi minute; grey. Antennæ ochreous-grey-whitish; in

♂ with moderate ciliations (1) and longer bristles ($1\frac{1}{2}$). Thorax ochreous-grey-whitish. Abdomen ochreous-whitish. Legs grey; posterior pair ochreous-whitish. Forewings narrow, costa moderately and evenly arched, apex rounded, termen obliquely rounded; ochreous-grey-whitish without markings; cilia whitish. Hindwings with termen rounded; ochreous-whitish; cilia whitish.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns, in October; Evelyn Scrub, near Herberton, in December or January; three specimens.

HALONE CORYPHÆA, *n. sp.*

κορυφαίος, chief.

This is the species described by Mr. Meyrick (P.L.S. N.S.W., 1886, p. 729) as *Mosoda consolatrix*, Ros. This is, however, an erroneous identification, as that name is a synonym of *Halone sobria*, Wlk. In the British Museum the two species have been confused, and most of the localities given by Sir Geo. Hampson (Cat. Lep. Phal. i., p. 279) for *sobria* are erroneous. The present species has a wide distribution.

Q., Warwick. N.S.W., Tenterfield, Glen Innes, Ebor, Bathurst, Mount Kosciusko (4,700ft.). V., Beechworth.

HALONE EBÆA.

ἥβαιος, little.

Halone ebæa, Hmps., Cat. Lep. Phal. Suppl. i., p. 589, Pl. 31, f. 16.

♂ 10 mm. Head whitish. Palpi rather long (2), very slender; whitish, apex fuscous. Antennæ whitish; in ♂ minutely ciliated. Thorax whitish. Abdomen fuscous, tuft whitish. Legs whitish. Forewings oval, costa strongly and evenly arched, apex rounded, termen obliquely rounded; whitish with a few fuscous scales; markings fuscous, indistinct; a dot on midcosta, a second in mid-disc, a third in fold, and a fourth on mid-dorsum, representing an angulated median line; a fine interrupted line from $\frac{3}{4}$ costa to $\frac{5}{6}$ dorsum, angulated outwards in disc; a dot on termen beneath apex, and a second above tornus;

cilia whitish. Hindwings with termen rounded, slightly sinuate beneath apex; pale grey; cilia pale grey.

Type in Coll. Turner. A minute and insignificant species.

N.Q., Kuranda, near Cairns, in February, March and May; Innisfail in November; seven specimens.

MACADUMA PICROPTILA.

πικροπτιλος, with sharp-pointed wings.

Macaduma picroptila, Hmps., Cat. Lep. Phal. Suppl. i., p. 580.

♂ 20 mm. Head, palpi, and thorax brown. Antennæ brown, in ♂ moderately ciliated ($\frac{2}{3}$), with longer bristles ($1\frac{1}{2}$). Abdomen grey; basal segment and apical tuft brown. Legs whitish-brown. Forewings irregularly quadrate, costa sinuate, strongly bowed at $\frac{3}{4}$, apex acute, produced, termen concave; 7, 8 and 9 stalked; brown, without defined markings; a fuscous dot on midcosta and another slightly beyond; traces of a transverse line from second dot; cilia ochreous-brown. Hindwings with termen rounded, slightly sinuate beneath apex; grey; short brown streaks from base along median and internal veins; cilia grey.

Type in Coll. Turner.

Q., Burpengary, near Brisbane, in April; one specimen.

CAPRIMIMA PELOCHROA.

πηλοχρωος, clay-coloured.

Caprimima pelochroa, Hmps., Cat. Lep. Phal. Suppl. i.; p. 611, Pl. 32, f. 16.

♂ ♀ 15-18 mm. Head, palpi, and thorax brownish-fuscous. Antennæ brownish-fuscous; ciliations in ♂ $1\frac{1}{2}$. Abdomen brownish-fuscous. Legs brownish-fuscous; posterior pair whitish. Forewings triangular, costa rather strongly and evenly arched, apex rounded, termen obliquely rounded; brownish-fuscous; a fine strongly-dentate fuscous line from $\frac{1}{3}$ costa to $\frac{1}{3}$ dorsum, in ♂ sometimes blackish on costa; a second similar but more finely dentate and often

indistinct line from $\frac{2}{3}$ costa to $\frac{2}{3}$ dorsum, bent outwards in disc; a similar indistinct subterminal line; cilia brownish-fuscous. Hindwings with termen rounded, slightly sinuate beneath apex; brownish-fuscous; cilia brownish-fuscous.

Type in Coll. Turner.

Q., Brisbane, in May and July; Killarney, in October; three specimens. The locality given by Hampson is incorrect.

TRICHOCEROSIA ZEBRINA.

Trichocerosia zebrina, Hmps., Cat. Lep. Phal. Suppl. i., p 739, Pl. 38, f. 26.

♂ ♀ 20-25 mm. Head blackish, face orange. Palpi blackish. Antennæ blackish; in ♂ bipectinate to apex, pectinations 6; in ♀ serrate; in both sexes hairy on upper surface of shaft. Thorax blackish, tegulæ orange. Abdomen blackish, apical segments ochreous; towards base beneath ochreous with two pairs of lateral orange spots. Legs blackish; middle joints of posterior tarsi ochreous. Forewings narrowly elongate-ovate, costa moderately arched, apex rounded, termen obliquely rounded; blackish; a transverse orange streak from dorsum near base, not reaching costa; an orange spot above dorsum at $\frac{1}{4}$; a second orange streak from mid-dorsum, in ♀ almost reaching midcosta, in ♂ shorter; an ochreous spot just above tornus, with another above in disc, in ♂ these two spots are absent; cilia blackish. Hindwings elongate-ovate; blackish; an orange sub-basal spot; a larger median spot elongated transversely; cilia blackish.

A brilliant little species very tropical in appearance. It differs from the type in having vein 9 present arising with 8 by a common stalk from 7.

Type in Coll. Lyell.

N.S.W., Lilyvale, Wingham, and Stanwell Park, near Bulli, in March; four specimens.

Gen. IONTHAS.

ιονθας, with fine hairs.

Ionthas, Hmps., Cat. Lep. Phal. Suppl. i., p. 777.

Head, thorax, and abdomen clothed with hairs above and beneath. Tongue absent. Palpi minute, porrect.

Antennæ of ♂ bipectinate to apex, pectinations long. Anterior coxæ hairy. Posterior tibiæ with all spurs present. Wings clothed with fine hairs. Forewings with 2 from $\frac{2}{3}$, 3, 4, 5 separately from near angle, 6 from near upper angle, 7, 9 stalked, 8 absent, 10 connate with 9, 11 from $\frac{2}{3}$. Hindwings with 3 and 4 connate, 5 approximated at base to 4, 6 and 7 stalked, 8 anastomosing with cell to $\frac{1}{6}$.

IONTHAS ATARACTA.

ἄταρακτος, unperturbed.

Ionthas ataracta, Hmps., Cat. Lep. Phal. Suppl. i., p. 777.

♂ 24 mm. Head pale ochreous-yellow. Palpi fuscous. Antennæ fuscous; pectinations in ♂ very long (10). Thorax fuscous; tegulæ pale ochreous-yellow. Abdomen ochreous. Legs fuscous. Forewings elongate-triangular, costa gently arched, apex rounded, termen rounded; oblique; pale fuscous; cilia fuscous-whitish. Hindwings broad, termen rounded; pale ochreous-yellow; a moderate fuscous terminal band, attenuated shortly beneath apex; cilia pale-fuscous.

Type in Coll. Turner.

Q., Warwick, in October; one specimen.

Subfam. Arctianæ.

RHODOGASTRIA TIMIOLIS, *n. sp.*

τιμιολις, worthy of honour.

♂ ♀ 60-64 mm. Head whitish, with a black dot on crown and another on forehead. Palpi short (1), not nearly reaching vertex; rosy, beneath whitish, apices of joints broadly blackish. Antennæ blackish, towards base rosy; in ♂ with minute almost inappreciable ciliations and short bristles ($\frac{1}{2}$). Thorax whitish with ten black dots, one each on tegulæ and patagia, and a double row of three on thorax. Abdomen rosy; basal segments in ♂ partly whitish-ochreous; a double lateral row of black dots; beneath whitish. Legs ochreous-whitish longitudinally streaked with rosy; tarsi rosy; a black dot on base of anterior coxæ. Forewings elongate-oval, costa strongly arched, apex round-pointed, termen slightly rounded, strongly oblique; whitish, semihyaline; a black dot on base of costa, a second on middle of base, and a third

closely following second ; a pale ochreous-fuscous broad transverse bar beyond middle on end of cell ; a large similar apical patch ; in ♂ whole of basal area to middle and on dorsum to tornus suffused with pale ochreous-fuscous ; cilia whitish, in ♂ pale ochreous-fuscous. Hindwings with termen slightly rounded in ♀, more strongly in ♂ ; in ♀ whitish ; in ♂ wholly suffused with pale ochreous-fuscous, with long hairs on basal area, and a darker bar on end of cell ; cilia whitish.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns (♀) ; Townsville in April ; three specimens received from Mr. F. P. Dodd. I have also seen a ♀ from N.A., Melville Island. The ♀ from N.Q., Cape York, described by Mr. Meyrick as *astreas*, Drury, is in all probability the same species. The females of the two species are scarcely distinguishable, but the males are very different.

Fam. NOCTUIDÆ.

Subfam. Agrotinæ.

CANTHYLIDIA EURHYTHMA, *n. sp.*

εὐρύθμος, well-proportioned.

♀ 25-26 mm. Head ochreous-whitish ; face pale ochreous-fuscous. Palpi ochreous-whitish. Antennæ pale ochreous-fuscous. Thorax ochreous-whitish. Abdomen whitish-ochreous, towards base ochreous. Legs ochreous-whitish. Forewings triangular, costa nearly straight, apex rounded, termen bowed, oblique ; ochreous-whitish ; markings dark-fuscous irrorated with pale-ochreous so as to appear greenish ; a broad median band, edged internally by a dentate fuscous line, and including a round whitish median discal spot ; a fine dentate line from $\frac{2}{3}$ costa, extending outwards beneath costa, then bent, and slightly sinuate to $\frac{2}{3}$ dorsum ; a subterminal transverse shade ; a terminal series of dark-fuscous dots between veins ; cilia grey-whitish. Hindwings with termen rounded ; ochreous-whitish ; a broad fuscous terminal band ; cilia whitish, with a grey sub-basal line.

Type in Coll. Turner.

Q., Gayndah ; two specimens received from Dr. Hamilton Kenny.

ARIATHISA SPILOCROSSA, *n. sp.*

σπιλοκροσσος, with spotted border.

♂ 26 mm. Head and palpi dark-fuscous. Antennæ dark-fuscous; in ♂ shortly and evenly ciliated ($\frac{1}{2}$). Thorax dark-fuscous with a few whitish scales. Abdomen grey. Legs fuscous mixed with whitish; posterior pair paler; tarsi dark-fuscous annulated with whitish. Forewings elongate-triangular, costa straight, apex rounded, termen scarcely oblique, rounded beneath; dark-fuscous; markings and some scattered scales whitish; a short dentate line from costa near base not reaching dorsum; a dentate line from $\frac{1}{4}$ costa to $\frac{1}{3}$ dorsum; orbicular represented by a minute white dot; reniform by a blackish spot, its posterior lower angle produced into a sharp point, edged especially posteriorly by whitish; two sharply dentate lines from beneath reniform to before tornus; a series of dots along apical half of costa and whole of termen; cilia fuscous, apices whitish. Hindwing grey; cilia whitish, towards apex grey.

Type in W.A. Museum.

W.A., Busselton, in October; two specimens.

Fam. LYMANTRIADÆ.

Subfam. Lymantrianæ.

Gen. EUZORA, nov.

εὐζωρος, pure.

Palpi minute, porrect. Antennæ bipectinated in both sexes. Thorax and abdomen not crested. Posterior tibiæ without middle spurs. Forewings with 2 from $\frac{3}{8}$, 3 from before angle, 7, 8, 9 stalked, 7 arising before 9, 10 and 11 from cell, no areole. Hindwings with 5 approximated at base to 4, 6 and 7 connate, 8 approximated to cell before middle.

Type *Porthesia collucens*, Luc. This genus is the same as *Caragola*, Moore, Lep. Atk., p. 46 (1879), Hmps., Moths Ind. i., p. 489, but that name is preoccupied (Gray, Pisces, 1851).

EUZORA COLLUCENS.

Porthesia collucens, Luc., P.L.S. N.S.W., 1889, p. 1090.
N.Q., Atherton. Q., Brisbane.

I formerly identified this species with *clara*, Wlk., Cat. Brit. Mus. xxxii., p. 343, but I note that Sir Geo. Hampson, Moths Ind. i., p. 490, states that in that species the palpi and legs are orange, which is not the case in my example.

LYMANTRIA ANTENNATA.

Lymantria antennata, Wlk., Cat. Brit. Mus., iv., p. 881.

Lymantria aurora, Turn., Tr. R.S.S.A., 1902, p. 181 (præocc.)

Lymantria turneri, Swin., Tr. E.S., 1903, p. 484.

Aurora = *turneri* is merely a varietal form. A series of bred specimens shows great variation in the reddish suffusion of abdomen and hindwings.

Lymantria maculosa, Wlk. Cat. Brit. Mus. iv., p. 881, is a synonym of *L. grandis*, Wlk., from Ceylon, and the Australian locality may be taken as erroneous.

LYMANTRIA NEPHROGRAPHA, *n. sp.*

νεφρογραφος, kidney-marked.

♂ 62-65 mm. Head white. Palpi blackish. Antennæ fuscous or blackish, pectinations brown. Thorax white. Abdomen white, apices of segments blackish. Legs whitish; tarsi fuscous. Forewings triangular, costa moderately arched, apex round-pointed, termen nearly straight, oblique; grey-whitish; markings blackish or sometimes partly reddish; a basal spot; a spot on costa near base, and another beneath it; a transverse row of four dots at $\frac{1}{6}$; an irregularly dentate line from $\frac{1}{3}$ costa to $\frac{1}{3}$ dorsum; a dot on costa before middle; a reniform median pale-centred discal spot; a dentate interrupted line from $\frac{2}{3}$ costa to $\frac{2}{3}$ dorsum, bent inwards beneath reniform; a similar subterminal line; a terminal series of dots; cilia whitish, on dots partly blackish. Hindwings subquadrate, obtusely angled on vein 4; fuscous, towards termen grey-whitish; a terminal series of blackish dots of which the two next tornus are transversely elongate; cilia as forewings.

Type in Coll. Turner.

Q., Mount Tambourine ; Killarney, in November ; two specimens.

LYMANTRIA PELOSPILA, *n. sp.*

πηλοσπιλος, clay-spotted.

♂ 38 mm. Head white. Palpi whitish, faintly brownish-tinged. Antennæ ochreous-whitish. Thorax white. Abdomen whitish, towards base ochreous-tinged. Legs whitish. Forewings broadly triangular, costa straight to beyond middle, then strongly arched, apex rounded, termen nearly straight, rounded beneath, slightly oblique ; white ; a brown subcostal spot near base, and a second beneath it ; a straight row of brown dots from $\frac{1}{3}$ costa to $\frac{2}{5}$ dorsum ; a suffused brownish fascia from $\frac{4}{5}$ costa bent outwards in disc, and then strongly inwards, then outwards again to $\frac{4}{5}$ dorsum ; a suffused interrupted line from $\frac{2}{3}$ costa joining fascia ; cilia white. Hindwings with termen strongly rounded ; white ; cilia white. Veins 6 and 7 of hindwings are short-stalked, which is unusual in this genus.

Type in Coll. Turner.

N.T., Port Darwin, in October ; one specimen received from Mr. F. P. Dodd.

IMAU MARGINEPUNCTATA.

B—Bak., Nov. Zool. 1904, p. 410.

N.Q., Atherton ; Kuranda, near Cairns in November, December, and February. Also from New Guinea.

Subfam. Anthelinæ.

ANTHELA CHRYSOCROSSA, *n. sp.*

χρυσοκροσσος, with golden border.

♂ 38 mm. Head fuscous, back of crown ochreous. Palpi fuscous, beneath ochreous. Antennæ pale ochreous, pectinations fuscous. Thorax fuscous ; patagia with a basal ochreous spot. Abdomen densely clothed with very long hairs towards apex ; fuscous. Forewings triangular, costa straight nearly to apex, apex rounded, termen strongly rounded, slightly oblique ; fuscous, partly suffused with orange-ochreous ; markings orange-ochreous ; a streak

along costa from base to $\frac{2}{3}$; a small discal spot at $\frac{1}{4}$, and another somewhat larger at middle; a fine strongly dentate subterminal line; cilia pale ochreous, bases mixed with fuscous. Hindwings with termen strongly rounded; dark fuscous; an ochreous discal dot at $\frac{1}{3}$; an orange-ochreous narrow terminal band containing a few dark-fuscous scales, its anterior edge dentate; cilia orange-ochreous, apices paler. Underside of forewings ochreous; discal dots faintly outlined and followed by a slight fuscous suffusion; a short fuscous line from costa at $\frac{3}{4}$; an interrupted dentate dark-fuscous subterminal line; a suffused fuscous terminal line not reaching tornus; of hindwings like upperside but with larger discal spot.

Type in Coll. Turner.

N.A., Batchelor, near Stapleton; one specimen received from Mr. G. F. Hill.

ANTHELA OCHRONEURA, *n. sp.*

ὠχρόνευρος, pale-nerved.

♂ 38 mm. Head and thorax ochreous-whitish. Palpi brownish-ochreous. Antennæ ochreous-whitish, pectinations brown. Abdomen pale brownish-fuscous; tuft and underside ochreous-whitish. Legs ochreous-whitish; anterior and middle pairs fuscous on anterior surface. Forewings triangular, costa straight, arched towards apex, apex rounded, termen strongly rounded, rather outwardly oblique; pale brownish-fuscous with strongly marked ochreous-whitish lines along veins; comprising a wide subcostal streak bifurcating beyond middle, and reuniting before apex, giving off five streaks to costa, apex and termen; a median streak giving off four streaks to termen; and a subdorsal streak ending in tornus; dorsal edge ochreous-whitish; cilia whitish, bases barred with pale brownish-fuscous. Hindwings with termen strongly rounded; pale brownish-fuscous; veins outlined by slender whitish lines; cilia as forewings. Underside similar, but lines on forewing obsolescent.

Type in Coll. Turner.

N.A., Stapleton, in January; two specimens received from Mr. G. F. Hill.

ANTHELA RUBICUNDA.

♂ *Darala rubicunda*, Swin., A.M.N.H. (7), ix., p. 419 (1902).

♂ *Anthela phœnicias*, Turn., Tr. R.S.S.A., 1902, p. 182.

♀ *Anthela aspilota*, Turn., Tr. R.S.S.A., 1902, p. 182.

In spite of the difference in colour, the ♂ being reddish-purple and the ♀ ochreous, I now believe these two sexes to be of the same species, which has a wide distribution.

N.Q., Cairns, Stannary Hills. Q., Brisbane, Stanthorpe. N.W.A., Roeburne.

Fam. THYRIDIDÆ.

Gen. ABROTESIA, nov.

ἀβρωτησιος, unfit for eating.

Head rounded. Tongue obsolete. (Palpi unknown). Antennæ of ♂ shortly bipectinate. Thorax and abdomen moderately stout. Posterior tibiæ not hairy. Forewings with 7 and 8 stalked, 9 and 10 short-stalked. Hindwings with 5 from below middle of discocellulars, but remote from 4, 6 and 7 remote at origin.

ABROTESIA GRIPHODES, n. sp.

γριφωδης, reticulated.

♂ 20 mm. Head reddish-brown. (Palpi broken). Antennæ reddish-brown; in ♂ shortly bipectinate (1). Thorax dark-brown; tegulæ and posterior end reddish-brown. Abdomen dark-brown, apices of segments ochreous. Legs brownish-ochreous. Forewings triangular, costa straight, apex round-pointed, termen strongly bowed, oblique; brownish-ochreous coarsely reticulated with brown-fuscous; a broad dorsal streak; a transverse fascia at $\frac{1}{3}$, and another at $\frac{2}{3}$, with some fine transverse lines before and between fasciæ; coarse reticulations between second fascia and apex; cilia brown-fuscous. Hindwings with termen slightly rounded; similar to forewings, but with fasciæ narrower. Underside similar, but pale-ochreous.

Type in Coll. Turner.

N.A., Port Darwin, in January; one specimen received from Mr. F. P. Dodd.

*Gen. CYDRASTIS, nov.**κνδραστις*, illustrious.

Frons rounded. Tongue well-developed. Palpi long, porrect; terminal joint long, stout, obtuse. Antennæ of ♂ (unknown). Thorax and abdomen moderately stout. Posterior tibiæ hairy. Forewings with 7 and 8 stalked, 9 and 10 parallel and closely approximated. Hindwings with 5 approximated to 4 at origin, 7 from before angle of cell, closely approximated to 8 for a short distance.

Allied to *Aglaopus*, Turn, with which it agrees in neururation, but differs markedly in the palpi.

CYDRASTIS CARYCINA, *n. sp.**καρυκινος*, blood-red.

♀ 24 mm. Head yellowish mixed with red; face bright red. Palpi $2\frac{1}{2}$, second joint long, slightly rough-haired; terminal joint $\frac{1}{2}$ second, smooth; yellowish mixed with red. Thorax and abdomen red mixed with pale-yellow and a few fuscous scales. Legs ochreous; anterior coxæ and femora red anteriorly; anterior tibiæ and tarsi fuscous anteriorly. Forewings triangular, costa moderately arched, apex round-pointed, termen bowed, slightly oblique; bright red with numerous thickly-set pale-yellow spots; costal edge fuscous; a series of fuscous subcostal spots confluent with this; a double transverse row of fuscous spots before middle; some small fuscous spots irregularly scattered in posterior part of disc; cilia yellowish, towards tornus reddish, on dorsum fuscous. Hindwings with termen rounded; as forewings.

Type in Coll. Lyell.

N.Q., Evelyn Scrub, near Herberton; one specimen received from Mr. F. P. Dodd.

STRIGLINA GLAREOLA.

Siculodes ? glareola, Feld., Reise Nov. Pl. 134, f. 11.

Songara vittata, Moore, P.Z.S., 1883, p. 27, Pl. vi., f. 7.

Songara decussata, Moore, P.Z.S., 1883, p. 27, Pl. vi., f. 8.

Striglina sordida, Pag., Iris v., p. 47.

Siculodes platyntis, Meyr., Tr. E.S., 1894, p. 479.

Striglina duplicifimbria, Warr., A.M.N.H. (6), xviii., p. 272.

Striglina decussata, Hmps., Moths Ind. i., p. 354.

Striglina glareola, Hmps., P.Z.S., 1897, p. 613.

This species appears variable. My examples agree fairly well with the description of Sir Geo. Hampson. Moore's figures are poor, Felder's is quite unrecognisable, but I believe Sir Geo. Hampson has examined his type.

N.A., Melville and Bathurst Islands (W. D. Dodd). Also from Java, Borneo, Ceylon, and India.

Gen. RHODONEURA.

In my revision of this family (Ann. Q. Mus. x., p. 97), I overlooked an important character. This is a large expanded tuft of scales arising from the base of the costa beneath, and overlying the frenulum. It is present in both sexes, not only in this genus but also in the genera *Oxycophina*, *Hypolamprus*, *Obelura*, and *Addæa*, but is absent in *Striglina* and the other Australian genera of this family.

RHODONEURA SPLENDIDA.

Pharambara splendida, Butl., A.M.N.H. (5), xx., p. 117 (1887), Hmps. Moths Ind., i., p. 363.

Pharambara parcipunctalis, Warr., A.M.N.H. (6), xvii, p. 210.

Rhodoneura raphiducha, Turn., Ann. Q. Mus. x., p. 106 (1910).

N.Q., Cairns, Herberton. Also from Solomons and India.

RHODONEURA SUBMICANS.

Dohertya submicans, Warr., Nov. Zool. xv., p. 330 (1908).

Rhodoneura crypsilitha, Turn., Ann. Q. Mus. x., p. 105 (1910). Q., Brisbane. Also from New Guinea.

RHODONEURA GIULIA.

Rhodoneura giulia, Swin. A.M.N.H. (7), x., p. 50 (1902).

♀ 22 mm. Head, palpi, and antennæ pale brownish-ochreous. Thorax pale brownish-ochreous, posteriorly whitish. Abdomen brownish-grey, towards base pale brownish-ochreous; a fuscous band on dorsum on apex

of fifth segment. Forelegs brownish-grey, apices of tibiæ and tarsal joints whitish; (other legs broken). Forewings triangular, costa straight to near apex, apex rounded, termen slightly sinuate beneath apex, then strongly bowed, oblique; pale brownish-ochreous, markings pale-fuscous; four rectangular costal spots, first near base, second at $\frac{1}{4}$, third before middle, fourth, rather larger, at $\frac{3}{4}$; an oblique streak from mid-dorsum to beneath $\frac{3}{5}$ costa; a subapical blotch connected with mid-termen; some short transverse strigulæ dispersed in disc; cilia whitish barred with fuscous on veins 2, 3, 4, and 7. Hindwings with termen doubly sinuate; colour and strigulæ as forewings; a transverse fuscous streak before middle; a second streak from tornus along termen for a short distance; cilia whitish. Underside similar but groundcolour paler, markings dark-fuscous and more clearly defined.

My example corresponds closely to Swinhoe's description, except that in this the ground colour is "orange-red."

N.Q., Evelyn Scrub, near Herberton, in January; one specimen received from Mr. F. P. Dodd. Also from New Guinea.

RHODONEURA MOLYBDITIS, *n. sp.*

μολυβδιτις, leaden.

♀ 18 mm. Head brownish-ochreous; face fuscous. Palpi pale fuscous, lower edge whitish. Antennæ whitish-ochreous. Thorax fuscous-brown; tegulæ brownish-ochreous. Abdomen whitish-ochreous partly suffused with fuscous. Legs whitish-ochreous; anterior pair fuscous with whitish annulations. Forewings obovate, costa straight to near apex, apex rounded, termen sinuate beneath apex, strongly bowed on vein 3, oblique; leaden-fuscous with obscure ochreous reticulations towards margins, on costa these are more conspicuous and whitish; cilia ochreous-whitish, barred with dark-fuscous at apex and broadly so opposite veins 3 and 4. Hindwings with termen sinuate beneath apex and bowed on vein 4; ochreous finely reticulated with fuscous; three fuscous fasciæ from dorsum at base, middle, and tornus, reaching about middle of disc; cilia ochreous with some obscure fuscous bars, apices whitish. Underside whitish-ochreous; forewings with

angular spots more or less confluent, forming interrupted antemedian, postmedian, and subterminal lines, the last connected with mid-termen; hindwings marked as on upper side.

Type in Coll. Turner.

N.A., Port Darwin; one specimen received from Mr. G. F. Hill.

ADDÆA ANERANNA, *n. sp.*

ἀνεραννος, unclovely.

♀ 17 mm. Head, palpi, and antennæ ochreous-whitish. Thorax and abdomen ochreous-grey-whitish. Legs ochreous-whitish; tarsi annulated with fuscous. Forewings triangular, costa straight, beyond middle slightly sinuate, apex acute and slightly produced, termen sinuate beneath apex, then strongly bowed, oblique; ochreous-whitish, markings pale brownish-fuscous; costa finely strigulated; an ill-defined basal patch; a postmedian fascia, well defined towards costa, towards dorsum lost in a strigulated dark shade which extends broadly along tornus and termen to beneath apex; cilia ochreous-whitish. Hindwings triangular, apex round-pointed, termen straight; as forewings but without basal patch and postmedian fascia. Underside similar but more distinct.

Type in Coll. Turner.

N.A., Port Darwin; one specimen received from Mr. F. P. Dodd.

Fam. PYRALIDÆ.

Subfam. Crambinæ.

PLATYTES IDIOPTILA, *n. sp.*

ιδιοπτιλος, with peculiar wing.

♂ 44 mm. Head whitish. Palpi 3; pale ochreous-brown, upper edge and internal surface whitish. Antennæ ochreous-whitish, beneath pale fuscous; in ♂ somewhat thickened and flattened. Thorax whitish, patagia reddish-brown. Abdomen whitish. Legs whitish; anterior pair ochreous-brown anteriorly. Forewings elongate, not dilated, costa moderately arched, apex rounded, tornus deeply incised at vein 3, the incision overhung by a hooklike

projection containing vein 4; whitish, strongly suffused with reddish-brown and fuscous except dorsal area and costal edge; an interrupted fuscous line from beneath $\frac{5}{6}$ costa, outwardly oblique, then bent strongly inwards towards $\frac{2}{3}$ dorsum; cilia grey, apices whitish, on apex whitish, on hook fuscous, on incision whitish. Hindwings more than twice breadth of forewings, termen sinuate; whitish, thinly scaled; cilia whitish.

Type in Coll. Turner.

N.S.W., Brewarrina; one specimen received from Mr. W. W. Froggatt. Very little is yet known of the lepidoptera of the western interior, and the advent of this large and remarkable form shows that there is still much to be discovered.

Subfam. Schoenobianæ.

Gen. STYPHLOLEPIS.

Hmps., P.Z.S., 1895, p. 912.

I have but one example (♀) of *S. squamosalis*, the only described species, and in this veins 6 and 7 of the forewings are separate at origin, not stalked, as stated by Hampson. I mention this as the latter structure, which is peculiar, occurs in the ♂ of the following species. Probably the difference in neuration is sexual.

STYPHLOLEPIS AGENOR, *n. sp.*

ἀγνρωρ, splendid.

♂ 46-48 mm. Head whitish-grey. Palpi 3; whitish-grey, base beneath white. Antennæ of ♂ flattened, thickened towards base, and shortly laminate; ochreous-fuscous. Thorax and abdomen grey. Legs whitish. Forewings with costa straight for $\frac{3}{4}$, then moderately arched, apex acute, termen sinuate beneath apex and above costa, in middle rather strongly bowed, oblique; 6 and 7 stalked in ♂ separate in ♀, 7, 8, 9, 10 stalked; grey-whitish coarsely irrorated with dark grey; some ochreous suffusion near base; a faint oblique grey line at $\frac{5}{6}$; cilia fuscous with a white patch above tornus. Hindwings with termen gently rounded; orange-ochreous towards apex suffused with grey; a short fine grey line from $\frac{3}{4}$ costa parallel to

termen; cilia whitish, on apex grey, with a fuscous basal line except on tornus and dorsum.

Type in Coll. Turner.

N.S.W., Brewarrina; two specimens received from Mr. W. W. Froggatt, who informs me that the larvæ bore the stems of *Capparis mitchelli*, feeding for about twelve months in the wood and finally killing the tree. This is an even finer discovery than the previous species described from the same locality.

Subfam. Pyralinæ.

CANGETTA AMMOCHROA, *n. sp.*

ἀμμοχροος, sand-coloured.

♂ 10 mm. Head pale-brown; face whitish. Palpi pale-brown; apex of second joint blackish; terminal joint white. Antennæ brown-whitish. Thorax pale-brown. Abdomen pale-brown, apices of segments whitish, but apex of ninth segment blackish. Legs whitish. Forewings triangular, costa straight, arched towards apex, apex rounded, termen rounded, scarcely oblique; pale-brown; a costal fuscous streak to $\frac{1}{3}$; two brown transverse lines, fuscous on costa; first at $\frac{1}{3}$, outwardly curved; second from $\frac{2}{3}$ costa to $\frac{3}{4}$ dorsum, nearly straight; four or five brown-fuscous dots on apical half of termen, edged by a narrow whitish shade; cilia white with a fuscous sub-basal line. Hindwings with termen gently rounded; as forewings but without first line; a line from $\frac{2}{3}$ costa forming a v-shaped curve in disc, and ending on dorsum near tornus.

Type in Coll. Turner.

N.A., Port Darwin, in January; one specimen received from Mr. F. P. Dodd.

Gen. TANAOBELA, *nov.*

ταναοβελος, with long weapons (palpi).

Frons with a short projecting tuft. Tongue present. Palpi extremely long (12), porrect; second joint extremely long, thickened with long loose scales above and beneath; terminal joint about $\frac{1}{3}$ second, spathulate, much thickened with loosely spreading scales at apex. Maxillary palpi long (1), triangularly dilated with scales. (Antennæ of ♂

unknown). Forewings with discocellulars very obliquely angled inwards, 2 from $\frac{2}{3}$, 3 from well before angle, 4 from angle, 5 from a little above angle, 6, 7, 8, 9 stalked, 6 and 7 arising by a common stalk which is very shortly coincident with that of 8, 9, 10 from well before upper angle, 11 from $\frac{2}{3}$, running into 12. Hindwings with 4 and 5 stalked, 6 and 7 connate, 7 anastomosing with 8 for a short distance.

This peculiar genus with its extraordinary palpi appears to be nearest *Lamacha*, Wlk. (Hmps. Tr. E.S., 1896, p. 526), though in this genus vein 7 of the hindwings and veins 6 and 11 of the forewings are free.

TANAOBELA CHRYSOCHLORA, *n. sp.*

χρυσοχλωρος, golden green.

♀ 20 mm. Head yellowish-green. Palpi pinkish-white densely irrorated with fuscous, inner surface whitish-ochreous. Antennæ pale ochreous-fuscous. Thorax yellowish-green. Abdomen pale-ochreous. Legs ochreous-whitish; anterior and middle tarsi annulated with dark-fuscous, posterior tarsi with pinkish. Forewings triangular, costa nearly straight, apex rounded-rectangular, termen straight, slightly oblique; yellowish-green without defined markings; a brownish streak on base of costa, and a minute dot beneath mid-costa; traces of a pale-fuscous dentate transverse line at $\frac{5}{8}$; some fuscous suffusion at tornus; cilia dark brownish-fuscous. Hindwings with termen strongly rounded; pale-pinkish; a narrow dark-fuscous sub-dorsal blotch, from the base of which arises a long tuft of pinkish hairs; cilia grey, on dorsum whitish.

Type (damaged) in Coll. Turner.

N.Q., Kuranda, near Cairns, in May; one specimen received from Mr. F. P. Dodd.

TITANOCEROS CATAPHANES.

Axiocrita cataphanes, Turn., P.R.S.Q., 1912, p. 136.

The genus *Axiocrita* must be dropped unless the ♂ shows reason for its retention. My type is a ♀; my error arose from overlooking the fact that in this group there is a single bristle in the frenulum in both sexes. The species is very similar to the ♀ of *T. cataxautha*, Meyr.,

but is certainly distinct. The much longer slender palpi, and the snow-white spot on base of anterior coxæ are in themselves sufficient distinctions.

MACALLA ZOPHERA.

Macalla zophera, Turn., P.R.S.Q., 1903, p. 196.

Macalla mixtirosalis, Hmps., A.M.N.H. (7), xvii., p. 135 (1906).

Q., Duaringa, Brisbane.

MACALLA PENTABELA, *n. sp.*

πενταβελος, with five arrows, or darts.

♂ 35 mm. Head greenish-fuscous. Palpi greenish-fuscous with some whitish scales. Antennæ fuscous; in ♂ dentate with fascicles of rather long cilia ($1\frac{1}{2}$); antennal processes dark-fuscous. Thorax reddish-whitish; patagia and tegulæ greenish. Abdomen whitish rather densely irrorated with fuscous. Legs dark-fuscous mixed with reddish and whitish scales; tarsi annulated with whitish. Forewings triangular, costa almost straight, a slight incision at $\frac{2}{3}$ preceded by a small glandular (?) thickening, apex round-pointed, termen bowed, slightly oblique; whitish suffused with greenish and irrorated with dark fuscous; a strong tuft of raised scales in disc at $\frac{1}{6}$, anteriorly whitish posteriorly dark-fuscous; a dark fuscous line from $\frac{1}{3}$ costa to dorsum before middle; a finely dentate slender fuscous line edged posteriorly with whitish, bent first outwards and then inwards to $\frac{3}{4}$ dorsum; median area whitish towards costa; a whitish subcostal tuft just beyond first line; a suffused dark-fuscous broad line from dorsal end of first line curved outwards along edge of cell, and emitting five slender streaks along veins 1, 2, 3, 4, and 5; terminal area whitish towards tornus; a terminal series of whitish dots on ends of veins; cilia reddish-whitish barred with fuscous. Hindwings with termen gently bowed; whitish, towards termen fuscous; a short dentate line from $\frac{2}{3}$ costa, terminal dots and cilia as forewings. Underside of forewings with dentate postmedian line well marked.

Type in Coll. Goldfinch.

N.S.W., Mount Kosciusko (5,000ft.), in January; one specimen taken by Mr. G. N. Goldfinch.

MACALLA EUPEPLA, *n. sp.**εὐπεπλος*, well-clothed.

♀ 36 mm. Head ochreous-green mixed with white. Palpi ochreous-green mixed with white and rosy; terminal joint rosy, apex whitish. Antennæ ochreous-green, at base mixed with white and rosy. Thorax ochreous-green mixed with whitish and rosy. Abdomen white mixed with fuscous and rosy, towards base and at apex suffused with ochreous-green. Legs fuscous, annulated with white and irrorated with rosy. Forewings triangular, costa straight, slightly arched towards apex, apex rounded, termen obliquely rounded; ochreous-green patchily irrorated with fuscous, white, and rosy scales; a triangular basal patch extending to $\frac{1}{3}$, its outer portion wholly ochreous-green; a transverse rosy line following this; a white spot on costa at $\frac{2}{3}$, extending as a dentate line a short way into disc, at its extremity two blackish dots; a white spot above dorsum at $\frac{2}{3}$ edged anteriorly and posteriorly with blackish; some short blackish streaks on veins beyond $\frac{2}{3}$; a rosy and white terminal shade, with a terminal series of ochreous-green spots; cilia whitish, bases barred with ochreous-green, apices with pale-rosy. Hindwings with termen rounded; whitish; towards termen shaded with fuscous; cilia as forewings.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns, in June; one specimen received from Mr. F. P. Dodd.

EPIPASCHIA CLETOLIS.

Also in British Museum from New Guinea.

ORTHAGA PICTA.

Stricta picta, Warr., A.M.N.H. (6), xvi., p. 461.

N.Q., Kuranda, near Cairns, in June; one ♂ specimen (Dodd).

Gen. TERMIOPTYCHA.

Termioptycha, Meyr., Tr. E.S., 1889, p. 504; Hmps., Tr. E.S., 1896, p. 451.

Sialocytta, Turn., P.R.S.Q., 1912, p. 134.

My description needs amendment in two particulars. The forewing of ♂ is not abbreviated, but the termen is

broadly folded over beneath, and vein 10 anastomoses with 9 beyond 7 in both sexes.

TERMIOPTYCHA CYANOPA.

Termioptycha cyanopa, Meyr., Tr. E.S., 1889, p. 505.

Sialocyttara erasta, Turn., P.R.S.Q., 1912, p. 134.

N.Q., Cairns. Also from New Guinea.

Subfam. Pyraustinae.

Gen. THOLERASTIS, nov.

θολεραστις, turbid, muddy.

Frons not projecting. Tongue present. Palpi long, ascending, recurved; terminal joint as long as second, slender, acuminate. Maxillary palpi moderately dilated. Forewings rather narrow, 5 absent, 8, 9, 10, 11 stalked. Hindwings with 5 absent, 8 anastomosing with cell and with 7. A derivative of *Nymphula*.

THOLERASTIS ELAPHRA, n. sp.

ἐλαφρος, light.

♀ 16 mm. Head, palpi, antennae, and thorax fuscous. Abdomen and legs pale fuscous. Forewings narrowly triangular, costa straight for $\frac{2}{3}$, gently arched towards apex, apex rounded, termen obliquely rounded; fuscous-whitish suffused with fuscous; a fuscous spot beneath costa just beyond middle; a pale submarginal line; cilia fuscous-whitish with a fuscous basal line. Hindwings with termen rounded; whitish with some pale grey suffusion; cilia whitish with a grey basal line.

Type in Coll. Turner.

Q., Killarney, in November; one specimen.

CATACLYSTA PERICOMPSA, n. sp.

περικομχος, exquisite.

♂ ♀ 11-14 mm. Head, whitish. Palpi $1\frac{1}{2}$; fuscous, apices whitish. Antennae fuscous-whitish; ciliations in ♂ $\frac{1}{4}$. Thorax fuscous; patagia mostly whitish. Abdomen fuscous or ochreous-brown, beneath whitish. Legs whitish; anterior coxae and femora fuscous; anterior tibiae and tarsi annulated with fuscous. Forewings elongate-

triangular, costa gently arched, apex round-pointed, termen slightly rounded, oblique; 10 from cell; brownish-ochreous sometimes partly suffused with fuscous; markings white edged with fuscous; short broad subcostal and dorsal streaks from base; two sickle-shaped fasciæ from dorsum at $\frac{1}{8}$ and $\frac{1}{3}$, outwardly curved, not quite reaching costa, narrowly connected beneath costa; a subcostal spot just beyond second fascia; a dorsal spot at $\frac{2}{3}$; a bar from $\frac{3}{4}$ costa to about middle of disc; a subterminal fascia from costa ending above tornus, mostly suffused with fuscous; cilia white with a dark-fuscous basal line, on apex and tornus fuscous. Hindwings with termen rounded; 7 and 8 coincident; colour as forewings; basal streaks present or absent; a transverse fascia at $\frac{1}{4}$ sometimes interrupted by a fuscous septum; a fascia from $\frac{3}{4}$ costa describing a sharp curve before apex and continued to dorsum near tornus, its curve including anteriorly an elongate spot; a black subterminal streak from beneath apex to before tornus, connected by bars with termen, and including five or six silvery dots; cilia white with a fuscous basal line.

Type in Coll. Turner.

N.A., Port Darwin; five specimens received from Mr. G. F. Hill.

MUSOTIMA STICTOCHROA, *n. sp.*

στεικτοχροος, speckled.

♀ 14 mm. Head whitish, irrorated with dark-fuscous. Palpi whitish with dark-fuscous annulations. Antennæ dark-fuscous. Thorax dark-fuscous with some whitish scales. Abdomen dark-fuscous mixed with whitish-ochreous, apices of segments whitish. Legs fuscous; tarsi partly whitish. Forewings triangular, costa twice sinuate, apex rounded; termen deeply sinuate beneath apex, then strongly bowed, incised above tornus; moderately oblique; dark-fuscous with some whitish-ochreous irroration; a fine whitish transverse line at $\frac{1}{3}$, angled outwardly in middle; a large oblong white discal spot beyond middle; a second fine whitish line from $\frac{4}{5}$ costa parallel to termen, then bent to below discal spot, and again bent at right angle to end in $\frac{2}{3}$ dorsum; a white subapical dot giving rise to an obscure

subterminal line of dots, ending in a white subternal dot ; cilia fuscous barred with white beneath apex, in sinuation, and in subternal incision. Hindwings with termen deeply sinuate beneath apex, irregularly dentate towards tornus ; colour as in forewings ; a curved transverse whitish line at $\frac{1}{4}$; a white discal spot before middle ; a whitish line from $\frac{2}{3}$ costa at first sinuate and approaching termen, dentate in middle, then bent inwards, and again bent to end in dorsum above tornus ; cilia dark-fuscous, irregularly barred with white.

Type in Coll. Turner.

N.S.W., Ebor (4,000ft.), in January ; one specimen.

Gen. TRIGONOBELA, *nov.*

τριγωνοβελος, with triangular weapons (palpi).

Frons flat. Tongue well-developed. Palpi moderately long, curved, ascending ; basal and second joint densely clothed with long scales beneath, forming a triangular mass on second joint ; terminal joint triangularly scaled, and forming an angle with second joint. Maxillary palpi filiform. (Antennæ in ♂ unknown). Posterior tibiæ with outer spurs about $\frac{1}{2}$ inner. Forewings with 3, 4, 5 approximated at base, 6 from above middle, 7 approximated at base to 8 and nearly straight, 8, 9 long-stalked, 10 separate but closely approximated to their common stalk. Hindwings with 3, 4, 5 approximated at base, and 4, 5 approximated for a short distance, 6 and 7 connate, 7 anastomosing with 8 for about $\frac{1}{2}$ its length.

The terminal joint of labial palpi resembles that of *Agrotera*, but in that genus the scaling of the first and second joints forms three distinct triangles.

TRIGONOBELA NEBRIDOPEPLA, *n. sp.*

νεβριδοπεπλος, clad in a fawn-skin.

♀ 34 mm. Head whitish-ochreous. Palpi fuscous-brown, base sharply ochreous-whitish. Antennæ pale-brown. Thorax and abdomen pale-brown. Legs brown-whitish ; anterior tibiæ and tarsi annulated with fuscous. Forewings elongate-triangular, costa scarcely arched, apex round-pointed, termen bowed, strongly oblique ; pale-brown

with pale-fuscos markings, and pale-ochreous spots; a dentate transverse line at $\frac{1}{4}$; a pale-centred discal spot before middle; a dentate line from $\frac{3}{4}$ costa, obsolete towards dorsum, preceded and followed by some small pale-ochreous spots; a subterminal series of pale-fuscos spots, succeeded by a series of pale-ochreous spots; cilia pale-fuscos. Hindwings with termen slightly sinuate; colour and markings as forewings but lines not dentate.

In its peculiar colouring and faint ill-defined markings this species is not like any other.

Type in Coll. Turner.

N.A., Port Darwin, in October; one specimen received from Mr. F. P. Dodd, with the note that the larva is an internal feeder in a species of scrub cane.

SYLEPTA POLYTIMETA, *n. sp.*

πολυτιμητος, precious.

♂ 25 mm. Head yellow; face whitish-yellow. Palpi whitish-yellow; basal joint black. Antennæ whitish-ochreous; ciliations in ♂ 1. Thorax yellow. Abdomen yellow, apices of segments white, but apices of ninth and tenth segments black. Legs whitish-yellow; anterior tarsi, apex of anterior tibiæ and base of anterior and middle tibiæ annulated with black. Forewings triangular, costa straight, gently arched beyond middle, apex round-pointed, termen slightly bowed, oblique; whitish with five partly-connected deep-yellow transverse fasciæ, near base, at $\frac{1}{4}$, at middle, at $\frac{3}{4}$, and on termen; four conspicuous black spots, on costa near base, on costa at $\frac{1}{4}$, in disc beneath midcosta, and on costa at $\frac{3}{4}$; a fine blackish terminal line, broader beneath apex; cilia whitish. Hindwings with termen slightly sinuate; as forewings but with only four yellow fasciæ, which are obsolete towards costa, and with only one black spot at apex.

Type in Coll. Turner.

N.A., Port Darwin, in December; one specimen received from Mr. F. P. Dodd, and I have seen another from the same locality.

SYLEPTA ZOPHOSTICTA, *n. sp.*

ζοφoστικτος, dark-spotted.

♂ 24 mm. Head whitish-ochreous; lower half of face fuscous. Palpi white; terminal joint and apices of first and second joints dark-fuscous. Antennæ whitish; ciliations in ♂ 1. Thorax whitish-ochreous; shoulders narrowly dark-fuscous. Abdomen ochreous-whitish with a pair of dark-fuscous dots on apex of second segment. Legs whitish, base and apex of anterior tibiæ and terminal joints of anterior tarsi dark-fuscous. Forewings triangular, costa straight, arched towards apex, apex round-pointed, termen slightly bowed, oblique; whitish-ochreous; a fuscous streak along costa throughout; dots dark-fuscous; one on dorsum near base; one at $\frac{1}{3}$ just beneath costal streak; another larger similarly placed at middle; a line of fine dots from $\frac{3}{4}$ costa, bent outwards in disc, again bent inwards, and ending in a dot above $\frac{2}{3}$ dorsum; cilia whitish. Hindwings with termen gently rounded; colour and cilia as forewings; a large median discal dot at $\frac{1}{3}$; a line of fine dots from costa at $\frac{3}{4}$, slightly bent outwards in disc, obsolete towards dorsum, but represented by a dot on dorsum at $\frac{3}{4}$; a spot on apex.

Type in Coll. Turner.

N.A., Port Darwin, in December; one specimen received from Mr. F. P. Dodd.

SYLEPTA EMMETRIS, *n. sp.*

ἐμμετρως, measured, moderate.

♀ 27 mm. Head whitish-ochreous; face whitish. Palpi whitish, towards apex greyish. Antennæ whitish-ochreous. Thorax whitish-ochreous. Abdomen ochreous-whitish. Legs whitish; base and apex of anterior tibiæ pale-fuscous. Forewings triangular, costa straight, arched towards apex, apex round-pointed, termen nearly straight, oblique; whitish-brown-ochreous; markings fuscous; a line from $\frac{1}{6}$ costa to $\frac{1}{4}$ dorsum, slightly curved outwards; a transverse discal mark before middle; a line from $\frac{2}{3}$ costa, slightly dentate at commencement, curved a little outwards in disc, then bent inwards at a right angle to beneath discal mark, bent again at a right angle, and ending on $\frac{3}{8}$

dorsum ; cilia ochreous-whitish. Hindwings with termen rounded ; as forewings but without first line.

Type in Coll. Turner.

N.A., Port Darwin, in November ; one specimen received from Mr. F. P. Dodd.

SYLEPTA PLACOPHÆA, *n. sp.*

πλακοφαιος, broadly fuscous.

♀ 36 mm. Head and thorax fuscous. Palpi with terminal joint slender, acute ; fuscous. Antennæ fuscous. Abdomen fuscous, towards base fuscous-whitish. Legs fuscous ; anterior tibiæ and all tarsi annulated with whitish-ochreous. Forewings triangular, costa gently arched, more strongly towards apex, apex round-pointed, termen bowed, oblique ; brown-whitish, markings fuscous ; a moderate basal patch ; a subcostal spot at $\frac{1}{3}$, succeeded by an oval pale-centred subcostal spot ; a dentate line from $\frac{2}{3}$ costa, bent inwards below middle to beneath second spot, and then at a right angle to $\frac{2}{3}$ dorsum ; a broad terminal fascia separated from the preceding by a fine dentate whitish line ; cilia fuscous, bases barred with whitish. Hindwings with termen rounded ; fuscous, towards base suffused with brown-whitish ; a median fuscous pale-centred spot at $\frac{1}{3}$; a whitish subcostal spot at $\frac{1}{3}$, giving rise to a fine dentate whitish line as far as vein 2 ; a whitish line from vein 2 at middle of disc nearly to tornus ; cilia as forewings.

Type in Coll. Turner. Referred to this genus for the present, but the slender acute terminal joint of palpi renders its position doubtful.

N.Q., Kuranda, near Cairns, in January ; one specimen received from Mr. F. P. Dodd.

SYLEPTA HICANA, *n. sp.*

ικανος, befitting.

♂ ♀ 17-21 mm. Head whitish-ochreous. Palpi fuscous ; base sharply white ; terminal joint short, obtuse, whitish. Antennæ whitish-ochreous ; ciliations in ♂ extremely minute. Thorax whitish-ochreous, towards base mixed with white ; terminal segment white with fuscous apex and whitish-ochreous tuft. Legs whitish ; anterior

coxæ and femora pale-fuscous; anterior tibiæ and tarsi annulated with fuscous. Forewings triangular, costa straight to near apex, apex round-pointed, termen bowed, strongly oblique; whitish-ochreous with some pale-fuscous suffusion especially on costa; a white subcostal dot at $\frac{1}{3}$; a squarish white subcostal spot, outlined with fuscous, at $\frac{1}{3}$; a fuscous line from anterior margin of this to $\frac{1}{3}$ dorsum; a fuscous line from $\frac{2}{3}$ costa very obliquely outwards for a short distance, then acutely toothed and transverse to middle of disc; space between this and following line clear white; a dentate line from shortly beyond preceding, at first transverse, then bent inwards at a right angle to beneath middle of disc, again bent and sinuate to $\frac{3}{5}$ dorsum; cilia fuscous, apices clear white. Hindwings with termen slightly rounded; whitish-ochreous with fuscous lines; a dentate transverse line at $\frac{1}{3}$; a dentate line from $\frac{2}{3}$ costa gradually approaching termen, beyond middle sharply bent inwards and continued to $\frac{2}{3}$ dorsum; a fuscous terminal line; cilia white, towards tornus with a fuscous basal line.

Sir Geo. Hampson refers this species to the genus *Samea*.

Type in Coll. Turner.

N.A., Port Darwin, in October and January; two specimens received from Mr. F. P. Dodd.

TYSPANODES METACHRYSIALIS.

Tyspanodes metachrysalis, Low., Tr. R.S.S.A., 1903, p. 63.

Tyspanodes phæosticha, Turn., P.R.S.Q., 1912, p. 146.

Gen. TORQUEOLA.

Torqueola, Swin., A.M.N.H. (7), xvii., p. 382 (1906).

Frons flat. Tongue well-developed. Palpi moderately long, ascending, appressed to face; second joint moderately thickened with loosely appressed scales, but not dilated nor tufted, terminal joint short, obtuse, dilated fanwise with loose scales. Maxillary palpi minute. Antennæ of ♂ with basal joint much dilated and excavated into a deep notch on inner side, with a short corneous spine from lower margin of notch, then simple to $\frac{1}{6}$, from $\frac{1}{6}$ to middle dilated and shortly bipectinate, from middle to apex slightly

serrate with short ciliations. Forewings with 7 curved at base, 10 closely approximated to 9. Hindwings with 4 and 5 approximated for a short distance, 6 and 7 connate, 7 anastomosing with 8 for half its length.

Type *Botys ophiceralis*, Wlk., from Java. The ♂ antennæ are highly specialised. Sir Geo. Hampson makes it a section of the genus *Glyphodes*, but I think the palpi are very different.

TORQUEOLA HYPOLAMPRA, *n. sp.*

ὕπολαμπος, brilliant beneath.

♂ 36 mm. Head, palpi, and antennæ dark-fuscous. Thorax and abdomen dark-fuscous; pectus shining snow-white. Legs fuscous. Forewings elongate-triangular, costa rather strongly arched, apex round-pointed, termen nearly straight, very oblique; dark-fuscous with a purple gloss; cilia fuscous. Hindwings rather elongate, termen slightly rounded; colour and cilia as forewings.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns, in February; one specimen received from Mr. F. P. Dodd.

MARGARONIA HYALOPTILA, *n. sp.*

ὕαλοπιλος, with transparent wings.

♀ 28 mm. Head fuscous-whitish; face and palpi pale-fuscous. Antennæ grey. Thorax and abdomen whitish irrorated with pale-fuscous. Legs whitish; anterior pair pale fuscous. Forewings elongate-triangular, costa straight, towards apex arched, apex round-pointed, termen slightly bowed, oblique; whitish, thinly-scaled, semi-transparent, with a purplish gloss when viewed obliquely; markings pale-fuscous outlined with darker fuscous; a dot on dorsum near base; a thick streak on basal fourth of costa, with two triangular expansions, first in middle, second near distal end; an incomplete fascia from immediately beneath mid-costa with crenated margins, bent inwards in disc, and ending in a rounded extremity above mid-dorsum; a thick interrupted dentate subterminal line; a fine terminal line; cilia whitish. Hindwings with termen gently rounded; colour as forewings; a fine fuscous

streak along median vein, ending in an irregular fuscous annulus before mid-disc ; subterminal and terminal lines and cilia as forewings.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns, in November ; one specimen received from Mr. F. P. Dodd.

MARASMIA LOXODESMA, *n. sp.*

λοξοδεσμος, obliquely banded.

♂ 14 mm. Head and thorax fuscous-whitish. Palpi fuscous, base sharply white. Antennæ whitish ; ciliations in ♂ minute. Abdomen fuscous-whitish, base whitish. Legs whitish ; anterior pair fuscous. Forewings triangular, costa straight almost to apex, apex round-pointed, termen bowed, oblique ; whitish with some fuscous suffusion at base and on costal part of disc, lines fuscous ; a line from $\frac{1}{4}$ costa, obliquely curved in disc to $\frac{1}{4}$ dorsum ; a similar line from costa before middle to dorsum before middle ; a third line from $\frac{3}{4}$ costa to $\frac{3}{4}$ dorsum ; a subterminal line from costa shortly before this, sinuate, not reaching tornus ; a fuscous terminal line ; cilia fuscous, bases narrowly whitish. Hindwings with termen gently rounded ; as forewings.

Type in Coll. Turner.

N.A., Port Darwin, in October ; one specimen received from Mr. F. P. Dodd.

METASIA PHRAGMATIAS.

Metasia phragmatias, Low., Tr. R.S.S.A., 1903, p. 66.

Metasia diplophragma, Turn., Tr. R.S.S.A., 1908, p. 97.

N.Q., Townsville.

METASIA ORPHNOPIS, *n. sp.*

ὀρφνωπὺς, dusky.

♂ ♀ 20 mm. Head and thorax fuscous. Palpi 3 ; fuscous, beneath white. Antennæ fuscous ; ciliations in ♂ $\frac{1}{4}$. Abdomen fuscous, beneath whitish. Legs fuscous-whitish ; anterior pair fuscous, tarsi annulated with whitish. Forewings triangular, costa slightly sinuate, arched towards apex, apex rounded, termen sinuate, oblique ; fuscous ;

lines dark-fuscous ; antemedian from $\frac{1}{4}$ costa to $\frac{1}{3}$ dorsum, indistinct ; postmedian from $\frac{3}{4}$ costa to $\frac{2}{3}$ dorsum, slightly dentate, partly edged posteriorly with whitish, at first straight, then bent outwards, and again inwards, and finally bent at a right angle towards dorsum ; a square whitish subcostal discal spot before middle ; cilia fuscous, bases narrowly whitish. Hindwings with termen rounded ; as forewings ; antemedian line curved, interrupted ; postmedian line not reaching much more than half across disc.

Type in Coll. Turner.

Q., Killarney, in November ; eight specimens.

METASIA CROCOPHARA, n. sp.

κροκοφαρος, saffron-robed.

♂ 11 mm. Head ochreous. Palpi fuscous, lower edge towards base sharply white. Antennæ whitish-grey. Thorax orange-yellow. Abdomen ochreous. Legs white ; anterior pair fuscous anteriorly. Forewings triangular, costa straight to near apex, apex pointed, termen sinuate, oblique ; orange-yellow, towards apex brownish-tinged ; a broad brown-fuscous streak along costa to $\frac{2}{3}$; a fuscous line from $\frac{2}{3}$ costa, distinct at commencement, but soon becoming slender and very obscure, apparently looped inwards in disc and then bent to end in $\frac{2}{3}$ dorsum ; a fuscous terminal line ; cilia with basal half white, apical half dark-fuscous. Hindwings with termen rounded towards tornus ; yellow, towards termen brownish-tinged ; terminal line and cilia as forewings.

Type in Coll. Turner.

Q., Stradbroke Island, in December ; one specimen. I have a second ♀ example from Stanthorpe, Q., in November, larger, more brightly coloured, and with the apices of the cilia white.

METASIA ASPHYCTA, n. sp.

ἀσφνκτος, feeble.

♂ ♀ 10 mm. Head whitish-ochreous. Palpi fuscous, lower edge narrowly whitish. Antennæ with joints slightly dilated at apices ; ochreous-whitish ; ciliations in

♂ minute. Thorax and abdomen whitish-ochreous. Legs whitish; anterior pair pale-fuscous. Forewings elongate-triangular, costa straight, apex round-pointed, termen slightly sinuate, oblique; whitish suffused with brownish-ochreous and on costa and termen with fuscous; lines fuscous; first from $\frac{1}{3}$ costa to $\frac{1}{3}$ dorsum, nearly straight; second from $\frac{3}{4}$ costa, bent outwards in disc, and then bent inwards below middle, ending on $\frac{2}{3}$ dorsum; cilia fuscous, apices whitish. Hindwings with termen gently rounded; whitish with faint brownish-ochreous suffusion; an outwardly curved transverse line at $\frac{2}{3}$; a broad pale-fuscous terminal suffusion; cilia as forewings.

Type in Coll. Turner.

N.A., Port Darwin, in February; two specimens received from Mr. F. P. Dodd.

METASIA ECBLETA, *n. sp.*

ἐκβλητος, despised.

♂ 11 mm. Head, thorax, and palpi fuscous. Antennæ fuscous; ciliations in ♂ minute. Abdomen grey. Legs whitish; anterior pair fuscous. Forewings narrowly triangular, costa gently arched, apex round-pointed; termen slightly rounded, oblique; ochreous-whitish with fuscous markings and irroration; a fuscous streak along costa to middle, another from base expanding into an irregular spot in mid-disc before middle, and a third much shorter on base of dorsum; an outwardly curved line from mid-costa to mid-dorsum; a terminal suffusion containing five or six ochreous-whitish terminal dots; cilia fuscous-whitish. Hindwings with termen rounded; grey; cilia grey.

Type in Coll. Turner.

N.A., Port Darwin, in October; one specimen received from Mr. F. P. Dodd.

CALAMOCROUS ASPILUS, *n. sp.*

ἄσπιλος, spotless.

♀ 25 mm. Head, thorax, and antennæ whitish-brown. Palpi 3; whitish-brown; lower edge of basal and terminal joints whitish. Abdomen whitish-brown, sides whitish.

Legs whitish-brown; posterior pair whitish. Forewings triangular, costa straight, (apices broken), termen obliquely rounded; uniform whitish-brown without markings; cilia pale-brown. Hindwings with termen rounded; whitish, thinly scaled, towards apex slightly brownish-tinged; cilia whitish, slightly brownish-tinged except on tornus and dorsum.

Type in Coll. Turner.

N.A., Port Darwin, in November; one specimen received from Mr. F. P. Dodd.

NOORDA AMETHYSTINA.

Autocharis amethystina, Swin., A.M.N.H. (6), xiv., p. 149.

Noorda hedyphaës, Turn., P.R.S.Q., 1912, p. 155.

Distinct from *N. fessalis*, Swin., I think.

PYRAUSTA EPICROCA.

Pyrausta epicroca, Low., Tr. R.S.S.A., 1903, p. 67.

Pyrausta perflavalis, Hmps., A.M.N.H. (8), xii., 23 (1913).

N. Q., Cairns, Stannary Hills, Townsville. Q., Brisbane, Mt. Tambourine. N.S.W., Sydney. Also from Louisiades.

PYRAUSTA PETROSARCA.

Pyrausta petrosarca, Low., Tr. R.S.S.A., 1903., p. 68.

Pyrausta apocrypha, Turn., Tr. R.S.S.A., 1908, p. 101.

N.Q., Cooktown? (Lower). Q., Brisbane.

MYRIOSTEPHES CALLIPEPLA, *n. sp.*

καλλιπεπλος, beautifully clothed.

♂ 12 mm. Head brown-whitish; face fuscous. Palpi 3; fuscous, beneath white. Antennæ dark-fuscous; in ♂ with a double row of long pectinations (3). Thorax dark-fuscous. Abdomen whitish. Legs dark-fuscous; posterior pair whitish; anterior and middle tarsi annulated with white. Forewings triangular, costa straight to near apex, apex rounded, termen obliquely rounded; dark-fuscous; markings snow-white; a broad bar from $\frac{1}{6}$ dorsum nearly reaching costæ; a fascia from $\frac{2}{3}$ costa to $\frac{2}{3}$ dorsum, expanded on costa, its posterior edge irregular; a subterminal streak

from tornus not reaching apex ; a series of minute sub-marginal lunules ; cilia fuscous with a pale median line. Hindwings with termen rounded ; white ; a pale-fuscous line at $\frac{2}{3}$ not reaching dorsum ; a similar line on termen ; cilia white, bases pale-fuscous.

Differs from the other species in the ♂ pectinate antennæ, but I doubt whether this will justify generic separation.

Type in Coll. Turner.

N.A., Port Darwin ; one specimen received from Mr. G. F. Hill.

Gen. PERIMECETA, nov.

περιμηκετος, long.

Frons flat, oblique. Tongue well-developed. Palpi long, porrect ; second joint very long, stout, smooth-scaled ; terminal joint exposed, rather long, obtuse. Antennæ of ♂ (unknown). Posterior tibiæ with outer spurs half inner. Forewings very long ; 8, 9, 10 stalked. Hindwings normal.

Probably allied to *Otiophora*, Turn., in spite of the stalking of vein 10. The ♂ may show additional characters.

PERIMECETA NIPHOTYPA, n. sp.

νιφοτυπος, snow-marked.

♀ 30 mm. Head fuscous-brown ; lateral margins of face whitish. Palpi 3 ; fuscous-brown, extreme base white. Antennæ fuscous-brown. Thorax fuscous-brown ; pectus white. Abdomen and legs brown. Forewings narrow-elongate-triangular, costa gently arched, apex rounded, termen obliquely rounded ; fuscous-brown ; a snow-white streak from base to $\frac{1}{4}$, at first subcostal, then bent downwards along fold, twice interrupted so as to form three spots in longitudinal series ; an inverted " comma " shaped snow-white spot in disc just beyond middle ; a white costal mark at $\frac{1}{2}$; a white dot on termen beneath apex, from it a series of dark dots in a straight line towards $\frac{1}{2}$ dorsum ; cilia brown, a darker basal line interrupted by white dots. Hindwings broad, termen slightly sinuate ; pale-brownish,

rather thinly scaled ; cilia whitish with a brown basal line.

Type in Coll. Goldfinch.

N.S.W., Tarce, in September ; one specimen.

Gen. *THESAURICA*, nov.

θησαυρος, a treasure.

Frons with a bluntly triangular prominence. Tongue well-developed. Palpi moderate, porrect, terminal joint downcurved. Maxillary palpi filiform. Forewings with tufts of raised scales ; 2 from $\frac{3}{4}$, 3 from just before angle, 4, 5 approximated at base from angle, 8, 9 stalked, 10 approximated to them. Hindwings with 4, 5 approximated for a short distance, 6, 7 connate, 7 anastomosing with 8 for less than half its length.

The combination of a triangularly projecting frons with tufted forewings makes this a very distinct genus.

THESAURICA ARGENTIFERA.

Sameodes argentifera, Hmps., A.M.N.H. (8), xi., 325 (1913).

♂ 16 mm. Head orange ; face whitish-ochreous. Palpi orange, base and upper edge white. Antennæ grey ; in ♂ thickened and with minute ciliations. Thorax orange with three whitish-ochreous spots on each side. Abdomen ochreous, bases of segments fuscous 5th to 8th segments with broad basal fuscous bands. Legs orange-ochreous, ventral aspect whitish ; tarsi brownish-ochreous annulated with white. Forewings rather broadly triangular, costa gently arched, apex rounded, termen slightly bowed, moderately oblique ; orange partly brownish-tinged ; a whitish-ochreous spot on base, connected with a spot just beyond, and this again with an irregular spot resting on $\frac{1}{2}$ dorsum ; three steely metallic streaks between this spot and costa, and a similar dot on $\frac{1}{2}$ dorsum ; an elevated ridge of similar metallic scales from $\frac{1}{4}$ costa to $\frac{1}{3}$ dorsum ; a squarish whitish-ochreous subcostal spot beyond this ; a broken series of raised metallic dots from mid-costa to $\frac{2}{3}$ dorsum ; a whitish-ochreous subcostal dot at $\frac{2}{3}$; a line of raised metallic dots from $\frac{1}{2}$ costa angulated outwards in disc, joining previous line on dorsum ; two elongate subterminal whitish-ochreous spots interrupting a sub-

terminal line of metallic dots; cilia orange, apices paler, on tornus grey. Hindwings with termen gently rounded; fuscous; terminal edge and cilia pale orange-ochreous.

N.Q., Kuranda, near Cairns, in March; one specimen received from Mr. F. P. Dodd.

HELIOTHELA DIDYMOSPILA, n. sp.

διδυμοσπιλος, twin-spotted.

♂ 10-11 mm. Head blackish. Palpi blackish, towards base beneath sharply white. Antennæ blackish; in ♂ thickened and slightly laminate with very short ciliations. Thorax blackish. Abdomen blackish; apices of first and third segments whitish. Legs dark-fuscous irrorated, and tarsi annulated with whitish. Forewings narrowly triangular, costa first straight then gently arched towards apex, apex rounded, termen obliquely rounded; blackish; a broad whitish line from $\frac{2}{3}$ costa reaching half across disc; cilia dark-fuscous, on apex with apices sometimes white. Hindwings with termen rounded; blackish; an oval orange-ochreous spot near base nearly reaching dorsum; a similar spot in disc rather to the costal side of middle; cilia dark fuscous.

Type in Coll. Turner.

N.Q., Herberton, in February. Q., Brisbane; Stradbroke Island in December and January. This little species appears to be scarce, for though I have known it for many years, I have only four examples.

HELIOTHELA OREIAS, n. sp.

ὄρειας, daughter of the mountain.

♂ ♀ 15-17 mm. Head blackish. Palpi with a fairly long dense tuft on apex of second joint beneath; blackish, bases of second and third joints white. Maxillary palpi blackish with three slender white rings. Antennæ blackish; ciliations in ♂ minute. Thorax dark-fuscous. Abdomen dark-fuscous with some ochreous irroration on sides, apices of segments whitish. Legs dark-fuscous irrorated, and tarsi annulated with whitish. Forewings narrowly triangular, costa straight or slightly sinuate, apex round, termen obliquely rounded; dark-fuscous with obscure

blackish lines ; first from $\frac{1}{4}$ costa slightly bent in disc to $\frac{1}{3}$ dorsum, and followed by a blackish subcostal dot ; second similar but more obscure from $\frac{3}{8}$ costa, rather strongly bent inwards in disc, and bent again to $\frac{2}{3}$ dorsum ; between upper bend and costa is a short straight transverse mark ; a third line shortly posterior and parallel to second, not reaching dorsum ; space between second and third lines irrorated with white from costa to mid-disc ; a few white scales on termen ; cilia dark-fuscous. Hindwings with termen rounded ; bright orange ; basal hairs, a line along dorsum, a discal spot, and a broad terminal band narrowed in middle, blackish ; cilia dark-fuscous, towards tornus paler with whitish apices.

This mountain species may be distinguished from *H. ophideres* by the blackish dorsum of hindwings, from *H. paracentra* by the absence of a white mark on dorsum of forewings, and from both by the tufted palpi.

Type in Coll. Lyell.

V., Mount St. Bernard, in January and February ; four specimens received from Mr. Geo. Lyell.

ECLIPSIODES ACROCAPNA, *n. sp.*

ἀκροκαπνος, with smoky apex.

♂ 18 mm. Head dark-fuscous mixed with whitish on crown. Palpi dark-fuscous, beneath whitish towards base. Antennæ fuscous ; ciliations in ♂ minute. Thorax dark-fuscous. Abdomen dark-fuscous, bases of segments whitish-ochreous. Legs dark-fuscous irrorated, and tarsi annulated with whitish-ochreous ; posterior pair mostly whitish-ochreous. Forewings triangular, costa gently arched, apex rounded, termen obliquely rounded ; whitish-ochreous much suffused with dark-fuscous ; a dentate dark-fuscous transverse line from $\frac{1}{4}$ costa to $\frac{1}{3}$ dorsum ; a dark-fuscous median subcostal annulus ; a dentate dark-fuscous line from $\frac{3}{4}$ costa bent inwards in disc and again downwards to dorsum beyond middle ; this is outlined posteriorly by a whitish line, beyond which terminal area is broadly infuscated ; a terminal series of dark-fuscous spots ; cilia dark-fuscous, apices whitish. Hindwings with termen slightly rounded ; whitish-ochreous with a very

broad dark-fuscous terminal band; cilia fuscous, apices whitish-ochreous.

Type in Coll. Turner.

Q., Gayndah; one specimen received from Dr. Hamilton Kenny.

SCOPARIA EMMETROPIS, *n. sp.*

ἐμμετροπις, precise.

♂ ♀ 20-22 mm. Head fuscous with some white scales. Palpi $2\frac{1}{2}$, tufts on second and third joints slightly separate; fuscous with some white scales, base white. Antennæ grey; ciliations in ♂ $\frac{1}{4}$. Thorax fuscous. Abdomen grey. Legs whitish irrorated with dark-fuscous; anterior pair mostly dark-fuscous; all tarsi dark-fuscous with whitish annulations. Forewings elongate-triangular, costa gently arched, apex rounded, termen rounded, slightly oblique; whitish irrorated with pale-grey and with a few scattered dark-fuscous scales; markings blackish; a short streak from base of costa along fold; first line dentate, oblique, from $\frac{1}{2}$ costa to $\frac{1}{4}$ dorsum; orbicular distinct, pale centred, touching first line; claviform dot-like, just beyond first line; reniform 8-shaped with two pale centres, but lower edge obsolete, connected with a dot on costa beyond middle; second line from $\frac{1}{2}$ costa, angled obtusely above middle, very slightly dentate, ending on $\frac{3}{4}$ dorsum; a suffused dark-fuscous subapical spot, and another on mid-termen; cilia whitish, bases barred with fuscous. Hindwings $1\frac{1}{2}$; grey-whitish; indications of a subterminal grey line; cilia whitish.

Characterised by the uniform groundcolour, dark lines, and distinct markings. The palpi approximate to those of *Tetraprosopus*.

Type in Coll. Turner.

N.S.W., Mount Kosciusko (5,000ft.), in January; three specimens.

SCOPARIA OCHROPHARA, *n. sp.*

ὠχροφαρος, pale-robed.

♀ 22 mm. Head grey. Palpi 3; fuscous, base sharply white. Antennæ grey. Thorax grey. Abdomen

grey-whitish. Legs whitish with some grey irroration; anterior and middle tarsi fuscous with whitish annulations. Forewings narrow, elongate, costa moderately and evenly arched, apex rounded, termen straight, oblique; pale-grey irrorated with white and with a few scattered blackish scales; a short fine blackish streak from base; first line obsolete, indicated only by a few blackish scales; orbicular indicated by a short longitudinal blackish streak touching first line; claviform by a few blackish scales just beyond first line; reniform by a short blackish streak with some blackish suffusion on its costal edge; second line distinct, whitish, anteriorly dark-edged, slightly dentate, from $\frac{3}{4}$ costa obliquely outwards, then obtusely bent above middle of disc, and ending on $\frac{2}{3}$ dorsum; some blackish streaks on veins towards termen; cilia white, bases barred with grey. Hindwings 2; whitish, thinly scaled; cilia whitish.

Distinguished by the pale forewings with orbicular and reniform reduced to streaks, and the whitish hindwings.

Type in Coll. Turner.

N.S.W., Mount Kosciusko (3,500ft.), in March; two specimens.

Fam. ZEUZERIDÆ.

ZEUZERA ÆGLOSPILA, *n. sp.*

αἰγλοσπιλος, lustrous-spotted.

♂ 45 mm., ♀ 80 mm. Head whitish; face blackish. Antennæ whitish, apical half blackish; in ♂ with long pectinations, apical half simple. Thorax whitish with thirteen dark-fuscous spots, which show greenish lustre on oblique illumination; a double median row of four spots each, two lateral rows of two each, and a median posterior spot. Abdomen whitish with median lateral, and sublateral series of spots similar to those on thorax. Legs dark-fuscous with blue and purple lustre; coxæ and basal part of femora whitish; anterior coxæ fuscous anteriorly. Forewings very elongate-triangular, costa gently and evenly arched, apex round-pointed, termen very obliquely rounded; whitish, thinly scaled, semi-translucent with numerous dark-fuscous or blackish spots, with greenish or purple lustre; a row on costa, the last spot before apex larger; three rows in cell between the

dividing veinlets; a row in each interneural space, a dorsal and a terminal row, both blackish; cilia whitish, on spots blackish and lustrous. Hindwings narrow, termen sinuate, tornus strongly produced; vein 6 from below upper angle of cell, parallel with 7; colour and cilia as forewings; a terminal series of minute spots similar to those on forewings, on tornal projection and just beyond these are fused into an elongate spot.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns; two specimens received from Mr. F. P. Dodd.

XYLEUTES OLBIA, *n. sp.*

ὀλβιος, happy.

♂ 90 mm., ♀ 135 mm. Head and palpi dark-fuscous irrorated with whitish. Antennæ whitish with dark-fuscous irroration, in ♀ dark-fuscous; pectinations in ♂ 6, dark-fuscous, apical $\frac{2}{3}$ simple. Thorax dark-fuscous with a few whitish scales, patagia except bases densely irrorated with whitish. Abdomen dark-fuscous, apices of segments grey-whitish; apical segments and tuft grey-whitish. Legs fuscous irrorated with grey-whitish; tarsi dark-fuscous with whitish rings. Forewings elongate, not dilated, costa nearly straight, apex rounded, termen scarcely rounded, strongly oblique, dorsum sinuate; pale grey, towards apex and termen grey-whitish, markings blackish; a series of spots on basal half of costa more or less confluent; a subcostal basal blotch with irregular outline; a series of fine transverse streaks through mid-disc as far as middle; a longitudinal streak above middle third of dorsum; a network at mid-disc, connected by a thick blackish irregular streak to termen beneath apex; between this streak and termen is a network extending to tornus; cilia whitish, barred with fuscous. Hindwings with apex narrowly rounded, pointed, termen nearly straight, tornus somewhat prominent; pale grey with some fuscous irroration and a network between middle of disc and middle half of termen.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns, in October; two specimens received from Mr. F. P. Dodd.

XYLEUTES DICTYOSCHEMA, *n. sp.*

δικτυοσχημος, with netted pattern.

♂ 62 mm., ♀ 94 mm. Head, palpi, and thorax dark-fuscous. Antennæ dark-fuscous; pectinations in ♂ 5, apical $\frac{1}{4}$ simple. Abdomen fuscous, apices of segments whitish. Legs dark-fuscous; tarsi with obscure whitish annulations. Forewings elongate-oblong, costa moderately and evenly arched, apex rounded, termen obliquely rounded, dorsum sinuate; dark-fuscous closely reticulated with blackish; some whitish irroration of costal edge, a sub-apical patch, above dorsum, and on termen; cilia fuscous mixed with whitish. Hindwings elongate, apex rounded, termen gently rounded; whitish, in ♀ grey, with dark-fuscous network on apical half; cilia as forewings.

Type in Coll. Turner.

N.Q., Kuranda, near Cairns, in October; two specimens received from Mr. F. P. Dodd.

XYLEUTES LEUCOMOCHLA, *n. sp.*

λευκομοχλος, white-barred.

♂ 120 mm. Head fuscous mixed with white; face and palpi dark-fuscous. Antennæ ochreous-fuscous; pectinations in ♂ 6. Thorax white irrorated with fuscous, a v-shaped blackish mark, its apex anterior, surrounds a central fuscous area. Abdomen whitish, bases of segments dark-fuscous. Legs fuscous. Forewings elongate, rather narrow, costa slightly arched, apex round-pointed, termen straight, oblique; dark-fuscous with scanty whitish irroration; a broad whitish median bar from base to beyond middle; connected with apex by ill-defined broad whitish streaks, partly strigulated with dark-fuscous; cilia dark-fuscous with some whitish scales. Hindwings broader than forewings, termen somewhat sinuate; fuscous-grey, darker towards base; some whitish suffusion at apex and tornus; cilia whitish with some dark-fuscous bars.

Type in Coll. Illidge.

W.A., Cunderdin, in November; one specimen taken by Mr. R. Illidge.

XYLEUTIS EREMONOMA.

Xyleutis eremonoma, Turn., Tr. R.S.S.A., 1906, p. 139.

Q., Cunnamulla. N.S.W., Brewarrina; one ♂ example received from Mr. W. W. Froggatt, who states that the larvæ feed in the roots of the "Roley Poley," the plants snapping off and blowing away through their infestation.

Fam. HEPIALIDÆ.

HEPIALUS ASTATHES, *n. sp.*

ἀσταθης, unstable.

♂ 41-44 mm. Head whitish sometimes pinkish. Palpi fuscous, internal surface whitish. Antennæ very short, ochreous-whitish. Thorax with a posterior crest; whitish, sometimes pinkish; an ill-defined transverse median greenish band. Abdomen whitish, towards apex greenish or pinkish. Legs ochreous-whitish or pinkish. Forewings triangular, costa strongly sinuate, apex acute, termen sinuate, oblique; pale green, or pinkish with or without greenish suffusion, some irregular darker striæ; a whitish streak on basal $\frac{2}{3}$ of costa; a slender whitish streak from mid-disc at $\frac{1}{8}$ towards but not reaching dorsum beyond middle, then curved and continued parallel to termen to $\frac{3}{4}$ costa; cilia whitish. Hindwings with termen sinuate; white; tinged with greenish or pinkish at tornus; cilia whitish.

♀ 46-72 mm. Forewings fuscous-reddish; a large triangular green blotch beneath costa from $\frac{1}{8}$ to $\frac{3}{4}$, its rounded lower angle approximating to mid-dorsum; a broad green terminal band not reaching tornus, sometimes with a projection on its anterior border in mid-disc; cilia fuscous-reddish. Hindwings with termen sinuate; pale red; some fuscous suffusion at tornus; cilia reddish.

Allied to *H. lignivorus*; the females of the two species are hardly distinguishable. The males are very distinct in the discal curved line, which in *astathes* is more like that of *lewinii*. The colouration of the ♂ varies much.

Type in Coll. Illidge.

W.A., Albany and Waroona; larvæ taken by Mr. R. Illidge emerged in February.

HEPIALUS TEPHROPTILUS, *n. sp.**τεφροπιλος*, ashy-winged.

♀ 112 mm. Head and palpi green. Antennæ ochreous-whitish. Thorax grey, anteriorly greenish-tinged. Abdomen whitish-ochreous, dorsum fuscous except three basal segments, and bases of other segments. Legs whitish-ochreous, greenish-tinged; tarsi grey. Forewings broadly triangular, costa nearly straight, arched towards apex, apex round-pointed, termen straight, oblique, rounded towards tornus; grey, at base and along costa greenish; several triangular whitish spots in basal half; a straight interrupted narrow whitish band from $\frac{1}{3}$ costa towards but not reaching mid-dorsum; a fainter similar band midway between this and termen; cilia grey. Hindwings broad, termen strongly rounded; grey; cilia grey.

Type in Coll. Illidge.

W.A., Albany; one specimen, which emerged in March, from a larva obtained by Mr. R. Illidge.



Turner, Alfred Jefferis. 1915. "Studies in Australian Lepidoptera." *The Proceedings of the Royal Society of Queensland* 27(1), 11–57.

<https://doi.org/10.5962/p.30291>.

View This Item Online: <https://www.biodiversitylibrary.org/item/49287>

DOI: <https://doi.org/10.5962/p.30291>

Permalink: <https://www.biodiversitylibrary.org/partpdf/30291>

Holding Institution

American Museum of Natural History Library

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.