

MICROLEPIDOPTERA
FROM
THE NEW HEBRIDES

RECORDS AND DESCRIPTIONS OF MICROLEPIDOPTERA
COLLECTED ON THE ISLAND OF ANEITYUM BY
MISS EVELYN CHEESMAN, O.B.E.



BY

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British Museum (Natural History) *ru*

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MICROLEPIDOPTERA FROM THE NEW HEBRIDES

RECORDS AND DESCRIPTIONS OF MICROLEPIDOPTERA COLLECTED ON THE ISLAND OF ANEITYUM BY MISS EVELYN CHEESMAN, O.B.E.

By J. D. BRADLEY

SYNOPSIS

A little over 700 specimens of Microlepidoptera collected by Miss Evelyn Cheesman on the island of Aneityum in 1955 are studied. Previous records from Aneityum are unknown, and the material provides new data on the geographical distribution of many species not previously recorded from the New Hebrides. Of the sixty-nine species represented, eighteen species and one subspecies are described as new to science. No new genera are described.

INTRODUCTION

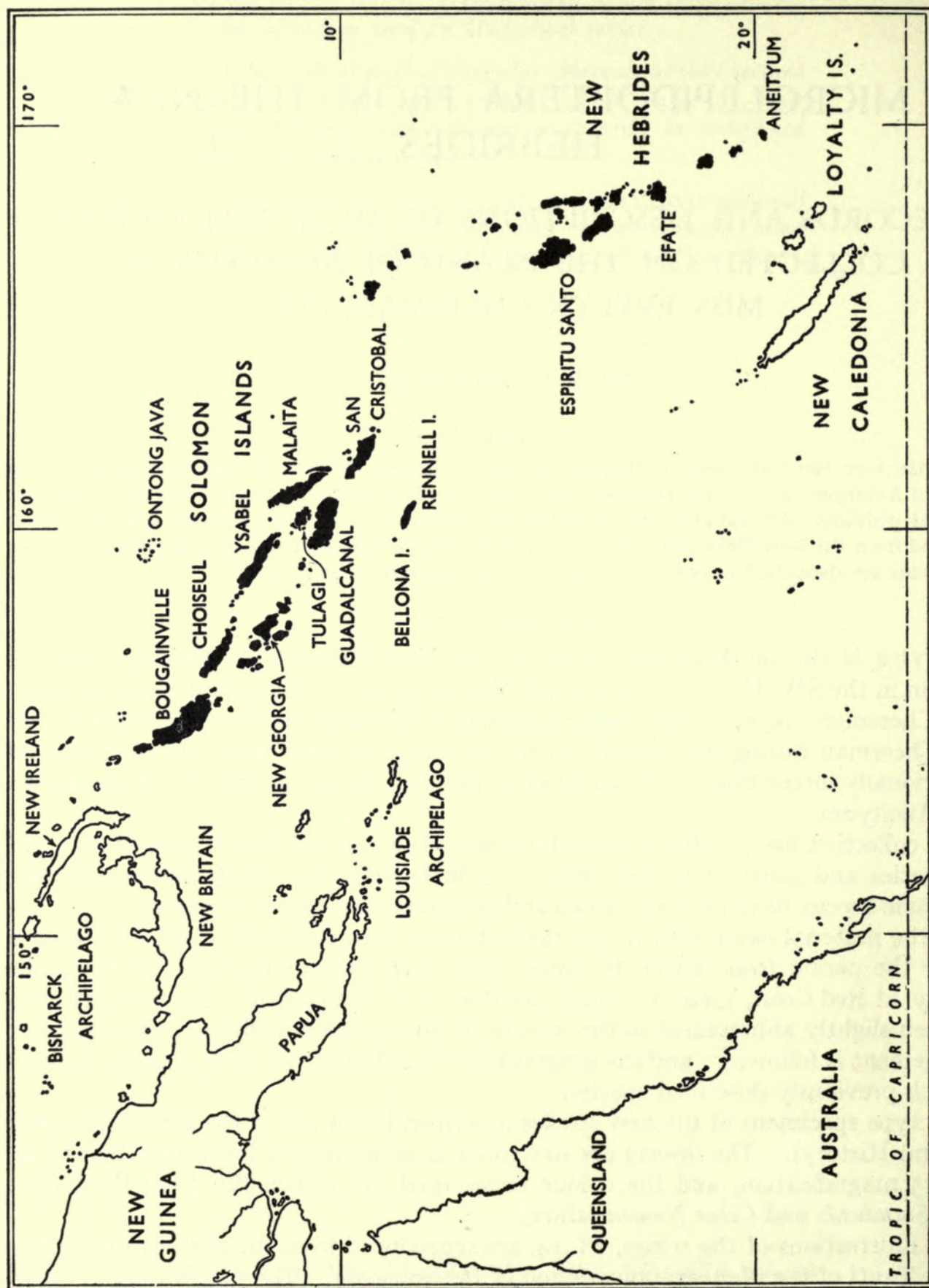
ANEITYUM is the southernmost island of the New Hebrides Archipelago, and its position in the SW. Pacific, shown in the Map on p. 250, is important biogeographically (Cheesman, 1957, *Nature*, **180** : 903-904). The Microlepidoptera collected by Miss Cheesman during her expedition to the island in 1955 have therefore proved exceptionally interesting, particularly as no previous records of this group are known from Aneityum.

The collection has greatly increased our knowledge of the distribution of many of the species and genera recorded below. A little over 700 specimens representing sixty-nine species have been examined and determined to species or genus.

All the material dealt with in the present paper was collected by Miss Cheesman during the period from March to June, 1955, both months inclusive, in the same locality, at Red Crest, 1,200 ft., 3 miles north-east of Anelgauhat. This locality data has been slightly abbreviated in the records of the species now listed. A systematic arrangement is followed ; and the geographical distribution, so far as known, is given for each previously described species.

The type specimens of the new species described below are in the British Museum (Natural History). The insects are described as seen under a low-power lens of up to $\times 15$ magnification, and the colour terms used are principally from Ridgway's *Color Standards and Color Nomenclature*.

The illustrations of the wings, Pl. 14, are reproduced from photographs taken by Mr. N. Tanti of the photographic section of this museum. The magnification varies in the photographs and has not been indicated ; instead the measurements across the fully-spread fore wings of the actual specimens studied are given under the figure



MAP.—The South-West Pacific, showing the geographical position of Aneityum, the southernmost island in the New Hebrides.

captions. The genitalia illustrations on Pls. 15-27 are from drawings by Mr. Arthur Smith.

TORTRICIDAE

TORTRICINAE

Tortrix sp. (*sensu* Meyrick)

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 2 ♀.

These two specimens are superficially reminiscent of the New Zealand species *Tortrix excessana* (Walker), and belong to a species in the same Australian and New Zealand species-group at present accommodated in the composite genus *Tortrix* Linnaeus. There are a number of Australian species of this group described by Turner which are not known to me, and the New Hebridean specimens perhaps belong to one of these.

Nesoscopa psarodes sp. n.

(Pl. 14, fig. 1)

♂♀, 11-13 mm. Labial palpus white, suffused and irrorate with mouse grey exteriorly. Head, thorax and tegula whitish diffusely irrorate with mouse grey except front of head (face). Antenna greyish fuscous, upper side thinly clothed with white scales near base; scape very short, whitish mixed with mouse grey. Fore wing whitish, usually mixed with grey, the grey coloration tending to form transverse striae and strigulae; a narrow slightly oblique diffuse mouse grey basal fascia mixed with blackish on costa and containing a jet black dash below costa and a second similar dash near middle, both dashes encircled with ochraceous-orange scales; a narrow curved mouse grey fascia at 1/4, variable and often incomplete, usually heavily overlaid with blackish on costa forming a quadrate well-defined blackish blotch; in the type specimen the edges of the fascia are moderately well defined and sprinkled with black scales, with in some examples a few ochraceous-orange scales at middle of outer margin; a similar straight slightly outwardly-oblique fascia at middle, usually with an admixture of blackish towards inner margin (dorsum) and on costa, proximal margin of fascia edged with ochraceous-orange at middle; distal part of wing traversed by several irregular curved oblique blackish striae; cilia whitish, a greyish sub-basal line. Hind wing and cilia smoke grey.

Male genitalia : Pl. 15, figs. 2 and 3.

Female genitalia : Pl. 15, fig. 1.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anel-gauhat, vi. 1955 (*L. E. Cheesman*). Genitalia slide 4911.

Allotype ♀, same data. Genitalia slide 5526.

Paratypes 15 ♂, 5 ♀, same locality data, dated from iii to vi. 1955. Genitalia slide 5515 (male).

This species superficially resembles *N. exors* Meyrick, the only other known species in the genus and described from Rapa I. The males of these two species can be readily separated by differences in the uncus which can be seen without dissection by brushing away a few of the covering scales and examining with a strong lens ($\times 20$). In *exors* the uncus is broad and obtuse and has two prominent sublateral barbs beneath the tip; in *psarodes* the uncus is slender and finger-like and is not barbed at the tip.

OLETHREUTINAE

Spilonota cryptogramma Meyrick

Spilonota cryptogramma Meyrick, 1922, *Exot. Microlep.* 2 : 520.

ANEITYUM : Red Crest, 1,200 ft., iii-vi. 1955, 23 ♂♀.

DISTRIBUTION. Fiji.

Compared with examples from Fiji, the New Hebridean specimens tend to be slightly smaller and have the blackish dashes in the discal and apical areas of the fore wing much heavier and darker, forming in some examples a continuous black stripe from middle to near apex. They possibly represent a distinct race, and when additional material from other localities becomes available their specific status will need to be reconsidered together with the species *S. infensa* Meyrick, described from Queensland, of which *cryptogramma* may prove to be no more than a subspecies.

Herpystis jejuna Meyrick

Herpystis jejuna Meyrick, 1916, *Exot. Microlep.* 3 : 16.

ANEITYUM : Red Crest, 1,200 ft., iv and v. 1955, 3 ♂, 1 ♀.

DISTRIBUTION. India, Java and Solomon Is. (Rennell I.).

Eucosma euryochra sp. n.

(Pl. 14, fig. 2)

♂♀, 15-19 mm. Labial palpus cartridge buff suffused with cream, basal and second segments overlaid with ochreous-tawny or cinnamon-brown exteriorly. Head, thorax and tegula cartridge buff, side of crown adjacent to eye, patagia and base of tegula cinnamon-brown. Antenna and scape cartridge buff, flagellum diffusely annulate with fuscous except base. Fore wing cartridge buff or whitish, some scattered grey and cinnamon-brown scales, heaviest in female; a narrow cinnamon-brown transverse fascia at 1/3, diffuse and weakly defined from costa to middle, thence becoming gradually more solid and darkened by an admixture of black scales, almost entirely black at inner margin (dorsum); basal area of wing between costa and plical fold and including upper (costad) half of fascia suffused with light violet-grey, in some examples this suffusion extends along the costal area beyond middle of wing but is usually less pronounced; a subtriangular cinnamon-brown mixed with black blotch on inner margin beyond middle, base of blotch greater than width of fascia; discal area without definable ocellus, sometimes shaded with pale violet-grey; costa marked with short cinnamon-brown and blackish strigulae, beyond middle of wing these are sometimes linked with rippled strigae of cinnamon-brown scales traversing the wing, one somewhat heavier chain intermixed with black scales from termen below middle curving inwards towards costa; a small round cinnamon-brown patch at apex centred with black and emitting a strigulation along termen; cilia cinnamon-brown mixed with dark plumbeous. Hind wing with veins 3 and 4 stalked; cinnamon-brown densely irrorate with fuscous scales; cilia greyish, a slightly darker sub-basal line. Posterior tibiae in both sexes rough-scaled above to about middle.

Male genitalia : Pl. 15, fig. 4.

Female genitalia : Pl. 16, figs. 1-3.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anel-gauhat, iii. 1955 (*L. E. Cheesman*). Genitalia slide 4846.

Allotype ♀, same locality data, dated iv.1955. Genitalia slide 5525.

Paratypes 10 ♂, 7 ♀, same locality data, dated from iii to iv.1955.

Provisionally placed near a species described from India, *E. legitima* Meyrick, which it superficially resembles in coloration and pattern, but it can be readily distinguished by the absence of the large blackish subapical terminal blotch present in the fore wing of *legitima*.

***Bactra blepharopis* Meyrick**

Bactra blepharopis Meyrick, 1911, *Proc. Linn. Soc. N.S.W.* **36** : 255.

ANEITYUM : Red Crest, 1,200 ft., iii and vi.1955, 3 ♀.

DISTRIBUTION. Australia (Queensland), Solomon Is., Fiji and New Hebrides.

***Polychrosis orthomorpha* Meyrick**

Polychrosis orthomorpha Meyrick, 1928, *Exot. Microlep.* **3** : 443.

ANEITYUM : Red Crest, 1,200 ft., iv.1955, 1 ♀.

DISTRIBUTION. New Hebrides.

***Crusimetra anastrepta* Meyrick**

Crusimetra anastrepta Meyrick, 1927, *Insects of Samoa*, **3**(2) : 71.

ANEITYUM : Red Crest, 1,200 ft., iv.1955, 1 ♂.

DISTRIBUTION. Ceylon, Sumatra, Samoa and Solomon Is.

***Strepsicrates glaucothoe* (Meyrick) comb. n.**

Spilonota glaucothoe Meyrick, 1927, *Insects of Samoa*, **3**(2) : 70.

Eucosma baryphragma Meyrick, 1937, *Exot. Microlep.* **5** : 159. **Syn. n.**

ANEITYUM : Red Crest, 1,200 ft., iii and vi.1955, 3 ♂, 1 ♀.

The new synonymy above has been confirmed after examination of the types in the British Museum (Natural History).

DISTRIBUTION. Samoa and Fiji.

***Strepsicrates poliophora* sp. n.**

(Pl. 14, fig. 3)

♂, 18 mm. Labial palpus white interiorly, pale gull grey exteriorly, second segment with well-defined dark mouse grey sub-basal and postmedial bands exteriorly and with apex slightly projected and suffused deep mouse grey, terminal segment indistinctly ringed with deep mouse grey at apex and suffused with similar coloration exteriorly. Head, thorax and tegula fuscous-black mixed and irrorate with pale gull grey, front of head white, a light grey patch on posterior of thorax. Antenna with notch at about 1/7, mouse grey, scape irrorate with light grey dorsally. Fore wing with broad costal fold, enclosing whitish hairs, from base to middle ; pale gull grey, costal and distal areas heavily and dorsal (inner margin) area lightly suffused and irrorate with an irregular mixture of deep mouse grey and fuscous ; an extensive almost blackish area between costa and plical fold reaching beyond middle to discal area ; a prominent tuft of raised light

grey scales barred with deep mouse grey at middle of plical fold ; costa marked from before middle to apex with short blackish strigulae ; a large circular blackish pretornal patch, nearly coalescent with blackish central area, a similar larger somewhat elongate patch in terminal margin, an admixture of sayal brown scales between this and the blackish central suffusion, a light sprinkling of sayal brown scales in area of wing having darker coloration ; cilia pale gull grey irrorate with deep mouse grey, a broad deep mouse grey basal line along termen. Hind wing dark fuscous ; cilia greyish, a mouse grey sub-basal line.

Male genitalia : Pl. 17, fig. 1.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iii.1955 (*L. E. Cheesman*). Unique. Genitalia slide 4883.

Very closely related to *S. glaucothoe* (Meyrick), *S. routhia* (Meyrick), and *S. dilacerata* (Meyrick) ; all four species no doubt originating from the same stock. *S. poliophora* may be readily distinguished from the other three species mentioned by the male genitalia which have a well-developed digitate projection on the ventral margin of the cucullus.

Mesocallyntera dascia sp. n.

(Pl. 14, fig. 4)

♂, 24-27 mm. Labial palpus tawny, upper edge of second segment rough-scaled towards apex and clothed with plumbeous-black scales tipped with light grey ; terminal segment very short, apex suffused plumbeous-black. Head fuscous, with an admixture of plumbeous-black strongest on frons and fore part of vertex between antennae, scales at middle and posterior of crown tipped with whitish buff. Thorax fuscous overlaid with loosely appressed leaden-metallic plumbeous scales, posterior crest mixed with tawny. Tegula tawny, shaded with dark fuscous at tip, overlaid with loosely appressed leaden-metallic plumbeous scales at base matching thorax. Antenna and scape fuscous. Fore wing brownish tawny, densely suffused with leaden-metallic plumbeous scales forming a nebulous irregular pattern over most of the wing ; markings blackish brown, distal margin of basal patch well defined, irregularly sinuous and slightly outwardly-oblique from costa at about $1/4$; a heavy but poorly-defined triangular marking from costa beyond middle, apex of this marking confluent in discal area with a tawny dash ; a moderately well-defined inwardly-oblique slightly undulate postmedial line, parallel with termen, from dorsum near tornal angle to near costa where it merges with a somewhat diffuse subtriangular blackish brown patch a little below costal margin, this patch extending obliquely to costa and edged outwardly with a fine leaden-metallic plumbeous line from costa to termen ; a small wedge-like tawny tuft on inner margin a little proximad of postmedial line ; a similar elongate tuft on inner margin before middle ; small interneural tawny dots along termen ; a small tawny mixed with blackish subterminal dashes on veins 3 and 4, and similar blackish dashes on veins 5, 6 and 7, all forming a chain ; costa marked with short pale tawny and blackish strigulae ; cilia plumbeous, a diffuse plumbeous-black basal line not evident at tornus where cilia are paler. Hind wing and cilia light fuscous ; a slender warm buff hair pencil from mesopleura sometimes concealed in vannal fold. Abdomen fuscous with an admixture of grey, a dense patch of specialized warm buff lanceolate scales on sternum of second segment. Legs fuscous, tarsi banded or suffused warm buff, tufts on fore and middle tibiae purplish black, inner side of hind tibia cartridge buff and with a long dense pencil of warm buff hairs from base.

Male genitalia : Pl. 18, fig. 1.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, vi.1955 (*L. E. Cheesman*). Genitalia slide 6020.

Paratypes 7 ♂, same data. Genitalia slide 4866.

Allied and similar in appearance to *M. squamosa* Diakonoff, found in the Celebes and, as a subspecies, in New Guinea. Differences in the valva of the male genitalia distinguish the two species, that of *dascia* being simple and not furcate as in *squamosa*.

***Olethreutes ancosema ancosema* (Meyrick)**

Argyroploce ancosema Meyrick, 1932, *Exot. Microlep.* 4: 310.

ANEITYUM: Red Crest, 1,200 ft., iv. 1955, 2 ♂.

Both specimens resemble the nominate form from Fiji, having the black medial marking on the fore wing unbroken, and are at least for the present referred to this subspecies. In the Solomons race, *O. ancosema solomonensis* Bradley, the medial fascia is interrupted at the middle.

DISTRIBUTION. Fiji.

***Olethreutes anaprobola* (Bradley)**

Argyroploce anaprobola Bradley, 1953, *Proc. Hawaii. ent. Soc.* 15: 109.

ANEITYUM: Red Crest, 1,200 ft., III-vi. 1955, 11 ♂, 1 ♀.

DISTRIBUTION. Fiji and Solomon Is.

***Cryptophlebia ombrodelta* (Lower)**

Arctophora (?) *ombrodelta* Lower, 1898, *Proc. Linn. Soc. N.S.W.* 23: 48.

Cryptophlebia carpophaga Walsingham, 1899, *Indian Mus. Notes*, 4: 106.

ANEITYUM: Red Crest 1,200 ft., iv and v. 1955, 2 ♂, 1 ♀.

DISTRIBUTION. Widespread in the Indo-Australian region, the larva being polyphagous on the leaves, pods, seeds and fruits of various tropical trees and shrubs.

***Cryptophlebia iridoschema* sp. n.**

(Pl. 14, fig. 5)

♀, 15 mm. Labial palpus buff-yellow, suffused exteriorly with amber brown. Head buff-yellow, some amber brown scales at side of face adjacent to compound eye, an orbit of rather slender scales on posterior of crown behind ocellus and adjacent to compound eye. Thorax buff-yellow suffused with amber brown, most strongly anteriorly. Tegula amber brown, paler at tip. (Antennae missing.) Fore wing with basal area to middle of costa and 1/3 inner margin (dorsum) amber brown, outer edge of this area sharply defined, almost straight, inwardly-oblique from costa to inner margin, edged with whitish beyond giving way to mars yellow in distal half of wing; a small triangular amber brown pretornal marking on inner margin; costa marked with very short oblique amber brown strigulae in apical half, those nearest the apex heaviest, terminating as thin lines of amber brown scales; a sprinkling of amber brown scales, sometimes arranged in short transverse chains, in distal area; interspersed between these are very small inconspicuous patches of plumbago-grey scales; cilia pinkish buff, a rather indistinct amber brown sub-basal line, shaded with sayal brown beyond. Hind wing mars yellow except basal 3/4 of costal area which is whitish; cilia pinkish buff, amber brown sub-basal line, shaded with sayal brown beyond.

Female genitalia : Pl. 16, fig. 4. Bursa copulatrix spherical, surface ornamented with minute rhomboidal scutellates, on one side a pair of weakly sclerotized granulate signa are present.

Holotype ♀, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, v. 1955 (*L. E. Cheesman*). Unique. Genitalia slide 6051.

A species of distinctive appearance, having brighter coloration than is usual for the genus, and also an unusual wing pattern. In general coloration nearest the two closely related species *C. ombodelta* (Lower) and *C. vitiensis* Bradley, but readily distinguished from these and other species of the genus by the transverse division of the fore wing into two distinct colour areas.

Cryptophlebia rhynchias (Meyrick)

Platypeplus rhynchias Meyrick, 1905, *J. Bombay nat. Hist. Soc.* 16 : 586.

ANEITYUM : Red Crest, 1,200 ft., vi. 1955, 1 ♀.

DISTRIBUTION. S. India, Ceylon, Australia (Queensland), New Hebrides and Sudest I.

SCHOENOTENINAE

Schoenotenes elaphrodes sp. n.

(Pl. 14, fig. 6)

♂, 15 mm. Labial palpus white, terminal segment wholly or partially suffused with greyish, second segment suffused with greyish exteriorly and with an admixture of blackish grey and ochreous in upper and lower margins. Head, thorax, patagia and tegula whitish grey, tinged and partially slightly suffused with ochraceous-buff. Fore wing whitish, suffused smoke grey except distal area ; scales roughened and raised more especially in discal area ; some vertical diffuse ochraceous-orange strigulation superimposed on the greyish suffusion ; a broad black line along plical fold from near base to middle of wing, terminating a little above inner margin (dorsum) ; a blackish dot at middle joining distally a broad blackish suffusion extending obliquely to costa a little before apex ; a moderately heavy diffuse ferruginous mixed with blackish dorsal blotch at or just beyond middle ; a few faint irregular transverse ochreous mixed with blackish strigulations in whitish terminal area ; several scattered rather inconspicuous black specks along edge of inner margin ; cilia whitish, basal half shaded ochraceous-buff, a faint blackish medial line, some faint blackish dots along termen at ends of veins. Hind wing greyish fuscous, darker distally ; cilia concolorous with wing basally, white apically.

Male genitalia : Pl. 18, figs. 2 and 3.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, v. 1955 (*L. E. Cheesman*). Genitalia slide 5516.

Paratype 1 ♂, same locality data, dated iii. 1955. Genitalia slide 6034.

This species is the only representative of the genus *Schoenotenes* Meyrick so far recorded from the New Hebrides. The centre of development of this genus is New Guinea, where the species are numerous, and it is but poorly represented elsewhere in the Indo-Australian region. The genus contains species arrangeable in a natural sequence according to fascia and genitalia development, and *elaphrodes* belongs in the group with subrectangular or subtriangular fore wings in which rough-scaling is reduced and may be present only in plical and discal scale tufts. The male genitalia are without hami, with pendulous socii, hooked gnathus and simple valva.

CHLIDANOTINAE

Caenognosis incisa Walsingham

Caenognosis incisa Walsingham, 1900, *A Monograph of Christmas Island*, p. 79.

ANEITYUM : Red Crest, 1,200 ft., iii and iv. 1955, 12 ex.

DISTRIBUTION. Australia (Queensland), New Guinea, Philippines and Christmas I.

Trymalitis cataracta Meyrick

Trymalitis cataracta Meyrick, 1907, *J. Bombay nat. Hist. Soc.* **18** : 153.

Trymalitis optima Meyrick, 1911, *Proc. Linn. Soc. N.S.W.* **36** : 294.

Trymalitis macarista Meyrick, 1934, *Exot. Microlep.* **4** : 489.

ANEITYUM : Red Crest, 1,200 ft., iii, iv and v. 1955, 2 ♂, 1 ♀.

DISTRIBUTION. E. Australia, New Guinea, Solomon Is., Bismarck Archipelago, Fiji, Siam, Andaman Is., Ceylon and Africa.

GELECHIIDAE

Stegasta variana Meyrick

Stegasta variana Meyrick, 1904, *Proc. Linn. Soc. N.S.W.* **29** : 394.

ANEITYUM : Red Crest, 1,200 ft., iv. 1955, 1 ♂.

DISTRIBUTION. Widely distributed in the Ethiopian and Indo-Australian regions.

Thiotricha oxyopis Meyrick

Thiotricha oxyopis Meyrick, 1927, *Insects of Samoa*, **3**(2) : 80.

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 1 ♂.

DISTRIBUTION. Samoa and Solomon Is.

Thiotricha sp.

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 1 ♂.

The wings of the specimen are rubbed and the species cannot be properly identified, but the genitalia indicate affinity with *T. oxyopis* Meyrick.

Thiotricha sp.

ANEITYUM : Red Crest, 1,200 ft., iv. 1955, 1 ♂, damaged.

Superficially similar to *T. tethela* Bradley which occurs in the Solomon Is.

Idiophantis lomatographa sp. n.

(Pl. 14, fig. 7)

♀, 14 mm. Labial palpus whitish interiorly, drab exteriorly, terminal segment with a deep violaceous iridescence exteriorly. Head with face warm buff, crown ochraceous-buff, suffused with glossy dark violet-grey medially. Antenna and scape whitish, suffused with dark violet-

grey anteriorly. Thorax and tegula purplish hair-brown. Fore wing with termen deeply excavated beneath linear upturned apical prominence; drab, costal edge paler, markings confined to distal area; an obtusely bent greyish white (plumbeous) blackish-edged subterminal streak, thickened and pure white at costa, preceded by an orange streak thinly edged blackish; area distad of subterminal streak orange on upper half, pale apricot yellow on lower half; a thick plumbeous streak along costa towards apex; a large mixed drab and black circular marking at middle of termen, a similar dash above in deep excavation beneath apical prominence, a third dash below a little before mid-way to tornus reaching inward from termen to middle of yellow blotch; cilia concolorous, tufted and white tipped with dark grey at extremity of apical projection, gold and iridescent reflections opposite mid-termen marking. Hind wing greyish, whitish around apex; cilia concolorous, a black basal line at apex. Abdomen purplish hair-brown above, cartridge buff below. Legs cartridge buff, suffused purplish hair-brown exteriorly.

Female genitalia: Pl. 19, figs. 1 and 2. Ostium very small, circular, situated centrally in a slight depression proximad to a deep U-shaped excavation in caudal margin of ostial plate. Ductus bursae filamentous to middle thence broadening considerably to bursa copulatrix, which is spherical and has a very long convoluted filamentous tube (possibly ductus seminalis) arising from proximal half.

Holotype ♀, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iv. 1955 (L. E. Cheesman). Unique. Genitalia slide 6580.

Related to *I. discura* Meyrick, an Asiatic species, and to *I. callicarpa* Meyrick, a Samoan species; and distinguished by the blackish dash on the termen of the fore wing toward the tornus, not present in other species of the genus.

Idiophantis soreuta Meyrick

Idiophantis soreuta Meyrick, 1906, *J. Bombay nat. Hist. Soc.* 17: 139.

ANEITYUM: Red Crest, 1,200 ft., iv. 1955, 1 ♀.

DISTRIBUTION. Ceylon and St. Matthias I.

Autosticha silacea sp. n.

(Pl. 14, fig. 8)

♂♀, 12–14 mm. Labial palpus warm buff, diffusedly irrorate with fuscous exteriorly. Head, thorax, tegula, antenna and scape warm buff; thorax and tegula diffusedly irrorate with dark brown and fuscous scales with a weak sheen; antenna weakly marked with fuscous segmental bars anteriorly, diffuse and less conspicuous in male. Fore wing warm buff, whole wing diffusedly irrorate with dark brown and fuscous scales with a weak purplish sheen; stigmata weak and obscure, plical slightly basad of discal, second discal hardly discernible at end of cell in middle; cilia warm buff, suffused greyish; a diffuse dark grey sub-basal line. Hind wing uniformly whitish cream-buff; cilia concolorous. Legs warm buff, weakly irrorate with fuscous exteriorly.

Male genitalia: Pl. 17, figs. 2 and 3. Tegumen margin broadly produced ventrally. Valva with weakly sclerotized glabrous area at middle of costa. Uncus moderately stout, obtuse. Gnathus produced medially to a long, slender, digitate point.

Female genitalia: Pl. 20, figs. 1 and 2.

Holotype ♂, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iii. 1955 (L. E. Cheesman). Genitalia slide 6038.

Allotype ♀, same locality data, dated iv. 1955. Genitalia slide 6577.

Paratype 1 ♂, same data as holotype. Genitalia slide 6527.

Superficially similar to *A. brunnea* Bradley, from the Solomon Is., but distinguished by the lighter coloration. The structure of the male genitalia of *silacea* indicates a close relationship to *A. solita* (Meyrick), a Fijian species, and *A. banausopa* (Meyrick), **comb. n.**, from the New Hebrides, and also to certain other species at present in the composite genus *Autosticha* Meyrick. The present generic placing is tentative. *A. banausopa* was originally described in the genus *Pachnistis* Meyrick and has now been transferred because of its close relationship, evident from the morphology of the genitalia, with *A. solita*. The latter species was originally described in *Pachnistis* but was later transferred by Meyrick (Meyrick in Wytsman, 1925, *Genera Insectorum*, fasc. 184 : 256).

A. silacea is larger than *banausopa* and *solita*, both these species having a wing expanse of 10–11 mm., and is further distinguished by its lighter ochreous coloration, which in those two species approaches dark brown. The venation of the fore wing also differs; in *silacea* vein 7 is present, and veins 8 and 9 arise from vein 7; in *banausopa* and *solita* vein 7 of the fore wing is absent (possibly coincident with vein 8), and veins 8 and 9 are stalked or connate. The generic value of the stalking of vein 9 with vein 7 in the fore wing in the *Autosticha* group of genera seems doubtful as the venation appears to vary between closely related species, but it may be reliable specifically. The marginal lobe developed ventrally on the tegumen in the male genitalia may be a character of generic importance, and is present in *silacea*, *banausopa* and *solita*.

SCAEOSOPHIDAE

Bathraula simulatella (Walker)

Cryptolechia simulatella Walker, 1864, *Cat. Lep. Ins. B.M.* 29 : 747.

Cryptolechia niveosella Walker, 1864, *Ibid.* 29 : 747.

ANEITYUM : Red Crest, 1,200 ft., v. 1955, 1 ♂.

DISTRIBUTION. Sarawak, Borneo, Philippines, Bismarck Archipelago and Society I.

COSMOPTERYGIDAE

Labdia clodiana Meyrick

Labdia clodiana Meyrick, 1927, *Exot. Microlep.* 3 : 384.

ANEITYUM : Red Crest, 1,200 ft., v. 1955, 1 ♂.

DISTRIBUTION. New Hebrides.

Labdia saliens Meyrick

Labdia saliens Meyrick, *Exot. Microlep.* 3 : 385.

ANEITYUM : Red Crest, 1,200 ft., iii, iv and v. 1955, 14 ♂♀.

DISTRIBUTION. New Hebrides and Solomon Is.

***Labdia calida* Meyrick**

Labdia calida Meyrick, 1921, *Exot. Microlep.* 2 : 411.

ANEITYUM : Red Crest, 1,200 ft., iv. 1955, 1 ♀.

DISTRIBUTION. Fiji.

***Labdia cedrinopa* Meyrick**

Labdia cedrinopa Meyrick, 1928, *Exot. Microlep.* 3 : 386.

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 2 ♀.

DISTRIBUTION. New Hebrides (Efate I.).

***Proterocosma triplanetis* Meyrick**

Proterocosma triplanetis Meyrick, 1886, *Trans. ent. Soc. Lond.* 1886 : 293.

ANEITYUM : Red Crest, 1,200 ft., iv and vi. 1955, 2 ♀.

DISTRIBUTION. Tonga, Fiji, Samoa, Solomon Is. and New Hebrides.

***Limnaecia microglypta* Meyrick**

Limnoecia [sic] *microglypta* Meyrick, 1928, *Exot. Microlep.* 3 : 393.

ANEITYUM : Red Crest, 1,200 ft., vi. 1955, 1 ♂.

DISTRIBUTION. New Hebrides (Efate I.).

***Limnaecia arsitricha* Meyrick**

Limnoecia [sic] *arsitricha* Meyrick, 1927, *Insects of Samoa*, 3(2) : 93.

ANEITYUM : Red Crest, 1,200 ft., iv. and v. 1955, 1 ♂, 1 ♀.

DISTRIBUTION. Samoa, Solomon Is. and New Hebrides.

***Ascalenia* sp.**

ANEITYUM : Red Crest, 1,200 ft., iv and v. 1955, 5 ♀.

Representing a species superficially approaching *A. armigera* Meyrick but with general coloration considerably darker.

A. armigera is known only from two male specimens; one the type from Fiji, and the other a specimen from the Solomon Is. As the specimens from the New Hebrides are females it has not been possible to make a genitalic comparison with *armigera*. It would be particularly interesting if this could be done, since the male genitalia of *armigera* have specialized setae on the valva which may be homologous with those found in the highly specialized genus *Hyposmochoma* Butler, endemic in the Hawaiian Islands.

CARPOSINIDAE

Peragrarchis rodea Diakonoff

Peragrarchis rodea Diakonoff, 1950, *Bull. Brit. Mus. (nat. Hist.), Ent.* 1 : 299.

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 1 ♂.

DISTRIBUTION. New Guinea.

Peragrarchis pelograpta (Meyrick), **comb. n.**

Meridarchis pelograpta Meyrick, 1929, *Trans. ent. Soc. Lond.* 76 : 502.

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 1 ♂, 1 ♀.

The New Hebridean specimens are smaller than specimens from the Austral Is., the only other known locality for this species, and slight genitalic differences in the male, particularly in the aedeagus, indicate some degree of subspeciation.

DISTRIBUTION. Austral Is.

Peragrarchis minima sp. n.

(Pl. 14, fig. 9)

♂, 14 mm.; ♀, 15 mm. Labial palpus in male about $1\frac{1}{2}$ width of eye, subascending; in female about 3 times width of eye, second segment being greatly extended, porrect; cartridge buff, second segment fuscous below and exteriorly to near dorsal margin, terminal segment with dark fuscous medial ring. Antennal ciliations in male 2–3 times width of shaft basally to near middle, gradually shortening towards apex to less than width of shaft, which is clothed dorsally with cartridge buff scales. Head, thorax, tegula and antennal scape cartridge buff. Fore wing cartridge buff irregularly suffused with tawny and irrorate with fuscous and fuscous-black, some scales grouped as raised tufts; 7 or 8 irregular fuscous-black elongate spots on costa; and ill-defined diffuse triangular patch resting on costal spots from middle to $4/5$, extending across wing beyond middle to fold, its apex truncate, containing a blackish tuft or tufts in disc; termen outlined with tawny; a diffuse poorly-defined tawny mixed with blackish subterminal fascia; cilia grey, basal half darker, minutely irrorate with black and whitish specks. Hind wing light grey; cilia matching.

Male genitalia: Pl. 22, figs. 1 and 2. Valva fused along basal portion of sacculus; cucullus weakly sclerotized, bipartite to near base—a characteristic of the genus—halves linear; sacculus with sclerotized denticulate subventral ridge in basal half, a strong curved tooth at base, a heavy denticulate apical patch preceded by a solitary, longer, aculiform tooth curved cephalad to nearly meet the subventral ridge. Aedeagus about as long as distance from apex of uncus to end of saccus, moderately sclerotized, dilated before middle, apex asymmetrical and produced at one side to a long slender point; two short, longitudinal, external patches of coarse close-set spine-like setae at about middle, approximate and to one side, one patch slightly larger; a densely compact subapical patch of hair-like setae internally.

Female genitalia: Pl. 21, figs. 1–3.

Holotype ♂, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iii. 1955 (*L. E. Cheesman*). Genitalia slide 6029.

Allotype ♀, same data. Genitalia slide 6055.

Related to the two closely allied species *Peragrarchis pelograpta* (Meyrick), mentioned above, and *Peragrarchis syncolleta* (Meyrick), **comb. n.**, which occurs in the Solomon Is. and the Andamans. Superficially most similar to *pelograpta* but smaller in size.

***Meridarchis celidophora* sp. n.**

(Pl. 14, fig. 10)

♀, 18–22 mm. Labial palpus porrect, about 3 times as long as width of head; white, basal segment suffused fuscous exteriorly, second segment strongly irrorate with fuscous below and exteriorly except at apex and upper margin of apical $\frac{2}{3}$, terminal segment with diffuse fuscous sub-basal ring. Head, thorax and tegula white, head weakly irrorate with dark fuscous on crown and laterally, anterior margin of thorax and basal half of tegula strongly suffused fuscous, posterior half of thorax thinly irrorate with fuscous-black. Antenna sordid white, weakly annulate with fuscous towards base; scape white. Fore wing white, dusted with fuscous, markings fuscous and fuscous-black; an inwardly-oblique basal patch, darker on costa, outer margin straight and edged with raised scales; an elongate solid fuscous-black costal marking before middle, succeeded by three smaller spots equidistant apart to $\frac{3}{4}$; a similar smaller spot at $\frac{4}{5}$; an ill-defined diffuse triangular fuscous mixed with fuscous-black fascia resting on costal spots from before middle to $\frac{3}{4}$, extending across wing to inner margin (dorsum), strongest at middle and distally, most diffuse inwardly towards inner margin, accompanied by tufts of raised scales in discal area; a series of diffuse confluent spots along termen; a weak greyish fuscous sub-basal shade line parallel with outer edge of medial fascia (or patch) nearer to termen than to fascia; cilia whitish grey, white at tornus, a greyish fuscous medial line along termen. Hind wing whitish grey; cilia matching, whitish basally and apically. Abdomen cartridge buff or whitish, suffused fuscous laterally. Legs whitish, marked with fuscous-black exteriorly.

Female genitalia: Pl. 19, fig. 3. Ostium concealed, limen weakly sclerotized, curved ventrally, dorsal wall produced as a thin, nearly quadrate plate with blunt digitate medial process. Ductus bursae dilated and weakly sclerotized for short distance beyond ostium, weakly scobinate. Bursa copulatrix membranous, pyriform, without signum.

Holotype ♀, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, v. 1955 (*L. E. Cheesman*). Genitalia slide 6054.

Paratypes 7 ♀, same locality data, dated iii, v and vi. 1955.

Near the Japanese *M. excisa* Walsingham, and closely resembling it superficially except that the medial fascia or patch on the fore wing is more extensive and pronounced, but differing in coloration which in *excisa* is more cinereous or grey.

***Carposina stationaria* Meyrick**

Carposina stationaria Meyrick, 1928, *Exot. Microlep.* 3: 402.

ANEITYUM: Red Crest, 1,200 ft., iv., v and vi. 1955, 15 ♂♀.

DISTRIBUTION. New Hebrides.

***Heterogymna cheesmanae* sp. n.**

(Pl. 14, fig. 11)

♂, 30–32 mm.; ♀, 36–40 mm. Labial palpus in male about $1\frac{1}{2}$ times width of eye, slightly recurved; in female about $2\frac{1}{2}$ times width of eye, porrect; cartridge buff, basal and second segments overlaid below and exteriorly, except apex of second segment, with mars brown, terminal segment with a broad moderately distinct medial annulus interrupted in male interiorly. Head cartridge buff, upper part of front and crown mixed with civette green laterally, an admixture of mars brown medially. Antenna strongly ciliate in male, filiform in female; cartridge buff suffused with mars brown, darker basally; scape civette green. Thorax civette green, a broad transverse mars brown patch anteriorly, a similar small patch laterally slightly posterior of

middle. Tegula civette green, usually with strong, mars brown irrorate with mummy brown markings at base and on apical half; in some examples a variable admixture of cartridge buff towards apex. Fore wing cartridge buff solidly overlaid with light elm green or bice green (in worn specimens the green coloration gives way to cartridge buff) lightly irrorate with mars brown; markings mars brown varying to very dark mummy brown; a small inwardly-oblique basal patch with an admixture of green near costa; male with costal fold reaching to beyond middle, heavily marked with mars brown in basal half and beyond middle; female with an irregular mars brown patch on costa at $1/4$, a narrow mars brown marking from before middle to $3/5$ of costa; in male this marking is shortened by the costal fold; in both sexes three small angular mars brown costal spots converging and separated by white flecks on costal margin; a narrow, inwardly-oblique irregular transverse band at $1/4$ interrupted before middle; a broad blotch-like incomplete fascia at $2/3$ interrupted and mixed with green, edges irregular and diffuse, extending to a little beyond middle of wing and disappearing towards inner margin; a narrow irregular subterminal band indented at middle; termen narrowly edged with small interconnected irregular wedge-shaped spots not reaching apex; inner margin (dorsum) strongly irrorate or overlaid with mars brown; cilia brownish, a darker basal line. Hind wing greyish drab, male with weak cubital pecten; basal $2/3$ of inner margin broadly whitish, in male including basal area of wing; cilia whitish, shaded with pale drab basally. Abdomen cartridge buff strongly overlaid with fuscous; in male a cartridge buff anal tuft.

Male genitalia: Pl. 22, figs. 3 and 4. Uncus curved, slender, digitate, acutely pointed; cucullus very narrow, slightly tapered, apex rounded; sacculus moderately broad, a small apical tooth; basal section of valva with short stout tooth near base of cucullus; vinculum evenly rounded, produced proximally to an obtuse point. Aedeagus extremely large and stout, containing about six large blade-like cornuti.

Female genitalia: Pl. 20, figs. 3 and 4.

Holotype ♂, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, vi.1955 (*L. E. Cheesman*). Genitalia slide 4890.

Allotype ♀, same locality data, dated v.1955.

Paratypes 5 ♂, 1 ♀, same locality data, dated iv and vi.1955. Genitalia slides 4828 (female) and 4889 (male).

A species of striking appearance and readily distinguished by the green coloration from other species of the genus. The male genitalia are similar to those of *H. ochrogramma* Meyrick.

I name this remarkable and singularly distinguished species after the collector, Miss Evelyn Cheesman.

Coscinoptycha improbana Meyrick

Coscinoptycha improbana Meyrick, 1881, *Proc. Linn. Soc. N.S.W.* 6: 701.

ANEITYUM: Red Crest, 1,200 ft., iii-vi.1955, 7 ♂, 43 ♀.

DISTRIBUTION. Australia (Queensland and N.S. Wales).

HELIODINIDAE

Hieromantis munerata Meyrick

Hieromantis munerata Meyrick, 1924, *Exot. Microlep.* 3: 66.

ANEITYUM: Red Crest, 1,200 ft., iii-vi.1955, 10 ♂♀.

DISTRIBUTION. Fiji, Samoa, New Hebrides.

***Stathmopoda periclina* Meyrick**

Stathmopoda periclina Meyrick, 1938, *Trans. R. ent. Soc. Lond.* **89** : 520.

ANEITYUM : Red Crest, 1,200 ft., iii and vi. 1955, 2 ♂, 1 ♀.

DISTRIBUTION. New Guinea and Solomon Is.

The type female is the only example known from Papua and has the abdomen missing, so that the identity of neither the New Hebridean nor the Solomon Islands specimens can be confirmed by examination of the genitalia until more topotypical material becomes available. Slight superficial differences are evident in coloration and markings of the fore wings of the examples examined from the three localities.

***Stathmopoda imperator* Bradley**

Stathmopoda imperator Bradley, 1957, *Nat. Hist. Rennell I., Brit. Solomon Is.* **2** (19) : 103.

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 2 ♀.

DISTRIBUTION. Solomon Is.

***Stathmopoda electrantha* Meyrick**

Stathmopoda electrantha Meyrick, 1927, *Exot. Microlep.* **3** : 377.

Stathmopoda transvecta Meyrick, 1927, *loc. cit.*

ANEITYUM : Red Crest, 1,200 ft., iii-vi. 1955, 16 ♂♀.

DISTRIBUTION. New Hebrides and Solomon Is.

***Stathmopoda* sp.**

ANEITYUM : Red Crest, 1,200 ft., iii, v and vi. 1955, 5 ♂.

The specimens are in poor condition but apparently belong to a species having uniform yellowish-buff coloration on the fore wing with no heavy or extensive markings and with an orange or ferruginous patagia (collar).

GLYPHIPTERYIGIDAE***Imma ochrophara* sp. n.**

(Pl. 14, fig. 12)

♂, 19 mm. Labial palpus light orange-yellow, second segment suffused drab below and at base exteriorly, paler interiorly; terminal segment similarly suffused exteriorly. Head pale orange-yellow, crown suffused with drab. Antenna and scape light orange-yellow. Patagia pale orange-yellow suffused drab. Thorax and tegula drab, weakly violaceous, thorax with light orange-yellow posterior crest. Fore wing light orange-yellow, basal half except edge of costa wholly overlaid with drab, with a weak violaceous iridescence, distal edge of this area diffuse, strongly and evenly convex from before middle of costa to a point opposite on inner margin; a large similarly coloured patch beyond middle in upper discal area, resting on costa, extending to or a little beyond middle, outer (distal) margin convex, inclined towards costa, followed by a line of darker interneural spots, inner (proximal) edge slightly outwardly-oblique, meeting lower (dorsal) edge at end of cell, a small darker spot in angle thus formed, a similar spot obliquely above in cell and set in margin of marking; a blackish somewhat diffuse thin subterminal line;

cilia drab, darker basally. Hind wing blackish hair-brown, thinly scaled from beyond middle to base, semitransparent basally; a yellowish hair-pencil in slight costal fold on upper surface near base; cilia drab, darker basally. Legs light orange-yellow exteriorly, whitish interiorly; middle and posterior tibiae marked with drab dorsally; posterior tarsi wholly whitish.

Male genitalia: Pl. 23, fig. 1.

Holotype ♂, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iv. 1955 (*L. E. Cheesman*). Unique. Genitalia slide 6040.

A distinctive species perhaps allied to the Solomon Islands species *I. thyriditis* Meyrick, from which it may be distinguished by the basal marking of the fore wing which in *thyriditis* is with the outer edge straight and outwardly-oblique from costa.

Imma oxystoma sp. n.

(Pl. 14, fig. 13)

♂♀, 15–17 mm. Labial palpus cartridge buff in male, cream-buff in female; a weak admixture of fuscous-black interiorly; male with second segment compressed laterally and proportionately widened, strongly suffused with fuscous-black exteriorly; terminal segment modified into a fine hair-like curved dark spine; female second segment cylindrical, with a broad fuscous medial band; terminal segment normal, cylindrical, obtuse, a small fuscous-black marking near base exteriorly. Head Prout's brown; anterior quarter of thorax and whole of tegula chestnut-brown, tegula somewhat irrorate apically with mummy brown mixed with a trace of whitish and elongated with hair-like mummy brown scales, middle of thorax whitish suffused with a mixture of chestnut-brown and grey, posterior of thorax fuscous-black, with a trace of whitish irroration in caudal margin. Fore wing chestnut-brown mixed with mummy brown, basal third overlaid with blackish, edged distally with scattered iridescent violet-plumbeous scales; three moderately large well-defined mustard yellow elliptical spots with suffused fuscous centres on costa, first beyond blackish basal area, second a little beyond middle, third at about $\frac{3}{4}$; an elongate transverse blackish bar at end of cell (along discocellulars), a sprinkling of iridescent violaceous scales beyond; a small blackish dot contiguous with inner margin of third costal marking; a similar pre-apical dash on costa; termen outlined with a thin blackish line in which are set minute pale mustard yellow dots at end of radial veins; cilia fuscous. Hind wing light fuscous, basal half thinly scaled, subhyaline; cilia paler, with a fuscous basal line.

Male genitalia: Pl. 23, figs. 2 and 3.

Female genitalia: Pl. 24, figs. 1 and 2.

Holotype ♂, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iii. 1955 (*L. E. Cheesman*). Genitalia slide 4884.

Allotype ♀, same data. Genitalia slide 4875.

Paratype 1 ♂, same data.

This species shares the peculiar modified labial palpus in the male with *I. chelacma* Meyrick, from Samoa, and also has veins 7 and 8 of the fore wing stalked, and vein 8 to the costa.

BLASTOBASIDAE

Blastobasis anthoptera Lower

Blastobasis anthoptera Lower, 1907, *Trans. R. Soc. S. Austr.* **31**: 118.

ANEITYUM: Red Crest, 1,200 ft., iii–vi. 1955, 2 ♂, 9 ♀.

The identification of the above specimens is based on two examples of this species in the British Museum (Natural History) collection from the New Hebrides. Both

examples have data labels "Efate I., Vila, vii.1925, P. A. Buxton" and were determined by Meyrick.

DISTRIBUTION. Australia (Queensland).

***Blastobasis* sp.**

ANEITYUM: Red Crest, vi.1955, 1 ♀.

Superficially reminiscent of *B. transcripta* Meyrick, which occurs in China and India.

YPONOMEUTIDAE

***Yponomeuta meracula* sp. n.**

(Pl. 14, fig. 14)

♂♀, 21–24 mm. Labial palpus white, upper side of second segment and whole of basal 2/3 of terminal segment overlaid with fuscous-black. Head, thorax and tegula wholly white. Antenna dark grey, whitish near base; scape pure white. Fore wing smooth-scaled, slightly glossy, snow white; anterior margin of costa strongly marked with fuscous-black basally, rather inconspicuous viewed directly from above; cilia matching. Hind wing mouse grey, lighter anteriorly and becoming white around apex and part of way along terminal margin, white or whitish in basal area and part of way along inner margin. Abdomen white.

Male genitalia: Pl. 25, figs. 1 and 2.

Female genitalia: Pl. 24, figs. 3–5.

Holotype ♂, NEW HEBRIDES: Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, v.1955 (*L. E. Cheesman*).

Allotype ♀, same locality data, dated iii.1955. Genitalia slide 4873.

Paratypes 6 ♂, 13 ♀, same locality data, dated iii, v and vi.1955. Genitalia slide 4905 (male).

This species is atypical of the genus in having the fore wing wholly white and unspotted and without markings except at base of anterior edge of costa. It is the sole representative of this genus known from the New Hebrides, and may be tentatively placed next to the Australian species *H. paurodes* Meyrick which is typically spotted.

***Anticrates difflua hebridensis* ssp. n.**

(Pl. 14, fig. 15)

Anticrates difflua Meyrick, 1927, *Insecta of Samoa*, 3 (2): 106.

The examples of this species from the New Hebrides are intermediate superficially as well as geographically between the nominate race from Samoa and *A. difflua rennellsensis* from the Solomon Is., and apparently represent a distinct subspecies. Their general coloration is brighter and stronger than in *difflua difflua*, but the bold reticulate markings of the fore wing do not attain the deep coral red coloration as in *difflua rennellsensis*. The markings on thorax and head are likewise stronger than in the nominate form but are not the deep reddish colour as in *rennellsensis*. The New Hebridean specimens are slightly larger—by 1–2 mm.—than specimens from Samoa and the Solomon Is.

Male genitalia : similar to those of *difflua difflua* and *d. rennellensis*. The genitalia of both sexes of this species are illustrated in a previous paper (Bradley, 1957, *Nat. Hist. Rennell I., British Solomon Is.* 2 (19) : figs. 65-69).

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, v. 1955 (*L. E. Cheesman*). Genitalia slide 4916.

Paratype 1 ♂, same data.

PLUTELLIDAE

Plutella maculipennis (Curtis)

Cerostoma maculipennis Curtis, 1832, *Brit. Entom.* 9 (105), No. 420.

ANEITYUM : Red Crest, 1,200 ft., v. 1955, 1 ♂, 1 ♀.

DISTRIBUTION. Cosmopolitan.

Orthenches delosticha sp. n.

(Pl. 14, fig. 16)

♂, 11 mm. Labial palpus cartridge buff, second segment suffused with fuscous exteriorly except at apex, an admixture of warm buff interiorly ; terminal segment tipped with fuscous-black. Head, thorax and tegula cartridge buff, lightly shaded with cream-buff, more especially at side of head ; lower part of front of head cartridge buff ; a narrow moderately distinct fuscous medial line on thorax. Fore wing cartridge buff thinly irrorate with blackish, more concentrated towards base ; veins diffusely etched with ochraceous-buff with variable admixture of drab ; a small blackish plical dash ; a similar round discal spot at $2/3$ with a minute blackish speck immediately costad ; a pair of rather thick blackish dashes close together near middle of termen ; a single similar pre-apical dash on costa ; cilia warm buff, a cartridge buff medial line from apex to near tornus broadly edged with drab. Hind wing smoke grey ; cilia matching, cream-buff basally. Abdomen and legs light buff ; legs suffused greyish exteriorly.

Male genitalia : Pl. 25, figs. 3 and 4.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, v. 1955 (*L. E. Cheesman*). Genitalia slide 6534.

Paratypes 4 ♂, same locality data, dated iii and iv. 1955.

The geographical distribution of the species in the genus *Orthenches* Meyrick is of considerable interest. The genus is strongly developed in New Zealand, but is well represented in Australia and also by several species in South America (Chile and Argentina), and one species is known from Assam. *O. delosticha* is superficially nearest the New Zealand species *O. chlorocoma* Meyrick, but is readily distinguished by the radiating nervure lines on the fore wing. The wing venation is slightly unstable, vein 2 of the fore wing being approximate, connate or very shortly stalked with vein 3 at the end of the cell.

EPERMENIIDAE

Epermenia symmorias Meyrick

Epermenia symmorias Meyrick, 1923, *Exot. Microlep.* 3 : 52.

ANEITYUM : Red Crest, 1,200 ft., vi. 1955, 1 ♂.

DISTRIBUTION. Fiji.

LITHOCOLLETIDAE

Acrocercops euthycolona Meyrick

Acrocercops euthycolona Meyrick, 1931, *Exot. Microlep.* 4 : 46.

ANEITYUM : Red Crest, 1,200 ft., iv. 1955, 1 ♀.

DISTRIBUTION. Java, India, Malaya and Solomon Is.

Acrocercops cramerella (Snellen)

Gracilaria [sic] *cramerella* Snellen, 1904, *Tidschr. Ent.* 46 : 84.

ANEITYUM : Red Crest, 1,200 ft., iii-vi. 1955, 8 ♂♀.

DISTRIBUTION. Widespread in the Indo-Australian region.

Caloptilia xanthopharella (Meyrick)

Gracilaria [sic] *xanthopharella* Meyrick, 1880, *Proc. Linn. Soc. N.S.W.* 5 : 141.

ANEITYUM : Red Crest, 1,200 ft., iv. 1955, 1 ♀.

DISTRIBUTION. Fiji and E. Australia.

LYONETIIDAE

Opogona mendanai Bradley

Opogona mendanai Bradley, 1961, *Bull. Brit. Mus. (nat. Hist.), Ent.* 10 : 161.

ANEITYUM : Red Crest, 1,200 ft., iii. 1955, 1 ♀.

DISTRIBUTION. Solomon Is.

Anastathma callichrysa Meyrick

Anastathma callichrysa Meyrick, 1886, *Trans. ent. Soc. Lond.* 1886 : 290.

ANEITYUM : Red Crest, 1,200 ft., vi. 1955, 4 ex.

DISTRIBUTION. Fiji.

Ereunetis capnosticta sp. n.

(Pl. 14, fig. 17)

♂♀, 10-11 mm. Labial palpus in male loosely scaled, apical segment tufted with long fine scales ; in female normal, scales closely appressed, slightly roughened beneath, apex of terminal segment obtuse and roughened ; in both sexes cream-buff, terminal segment in female strongly suffused with fuscous ; terminal segment in male with a small fuscous patch on upper margin at base. Head cream-buff, crown sometimes mixed with greyish. Antennal scape cream-buff ; flagellum greyish fuscous. Thorax cream-buff, a diffuse hair-brown or fuscous medial line and a similar weak suffusion laterally. Tegula cream-buff strongly suffused with hair-brown or greyish fuscous. Fore wing cream-buff sparsely and irregularly irrorate with hair-brown or greyish fuscous scales ; markings consisting mainly of diffuse, somewhat irrorate, small hair-brown or greyish fuscous subquadrate or rounded patches scattered irregularly over the wing, usually larger and often darker near the base, in strongly marked specimens these markings are

more extensive and occasionally coalesce ; an elongate patch at base of costa ; a blackish apical dot ; cilia cream-buff suffused with hair-brown except at apices, a faint sub-basal line. Hind wing somewhat shining light drab, darker and weakly infusate along inner margin distally ; cilia hair-brown ; male with a specialized pencil of fine cream-buff hairs arising near base a little below costa and reaching beyond middle. Legs cream-buff suffused with hair-brown exteriorly. Abdomen greyish hair-brown, paler beneath.

Male genitalia : Pl. 26, figs. 1 and 2. Aedeagus with a small internal sheaf of about 5 or 6 minute cornuti.

Female genitalia : Pl. 26, fig. 3.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iv. 1955 (*L. E. Cheesman*). Genitalia slide 6537.

Allotype ♀, same data. Genitalia slide 6582.

Paratypes 21 ♂, 7 ♀, same locality data, dated iii, iv and vi. 1955.

Additional material : 285 ♂♀, same data as type material. These are mostly in damaged condition and have not been used for descriptive purposes.

This species is near *E. intertexta* Bradley, which occurs in the Solomon Is. It may be distinguished from that species by the absence of the light quaker drab and yellow coloration present in *intertexta* in the distal area of the fore wing. The specialized hair-pencil on the upper surface of the hind wing in *capnosticta* is not present in *intertexta*.

Decadarchis eustropha sp. n.

(Pl. 14, fig. 18)

♂♀, 10–11 mm. Labial palpus white, second segment marked with fuscous exteriorly to near apex, suffused greyish interiorly, bristles dark brown. Head white or sordid white. Antennal scape white, sometimes an admixture of fuscous below and anteriorly ; flagellum fuscous-black, white-scaled ventrally ; a thin conspicuous white anterior line composed of a chain of very slender white scales. Thorax and tegula white overlaid with a mixture of mummy brown and fuscous, darker towards posterior of thorax and base of tegula. Fore wing with apex upturned ; white ; markings blackish mummy brown ; a small dense patch at base of costa extending along anterior edge to a broad, well-defined, solid, transverse fascia from between 1/4 to near middle ; dorsal half of wing proximad to this fascia diffusely irrorate with fuscous ; an inwardly-oblique, diffuse, ill-defined fascia at about 2/3 dilated distally and occupying most of apical half, inner edge diffusely irrorate more or less straight from costa at about 3/4 to near middle of inner margin (dorsum) where it converges with the prominent submedial fascia ; an intense subapical spot ; cilia white irregularly irrorate with fuscous, a blackish mummy brown basal line around apex. Hind wing whitish grey ; cilia paler. Legs whitish, tarsi marked with blackish fuscous exteriorly.

Male genitalia : Pl. 27, figs. 1 and 2.

Female genitalia : Pl. 26, figs. 4 and 5.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, v. 1955 (*L. E. Cheesman*). Genitalia slide 6535.

Allotype ♀, same locality data, dated vi. 1955. Genitalia slide 6581.

Paratypes 3 ♀, same locality data, dated iv, v and vi. 1955.

Near *D. discreta* Meyrick, which occurs from the Solomon Is. south-west to New Guinea, and distinguished by its smaller size, *discreta* having a wing expanse of 16–21 mm., and also by the well-defined directly transverse fascia on the fore wing at 1/3, which in *discreta* is slightly outwardly-oblique, dilated at inner margin of wing, and connected medially to the distal fascia.

***Decadarchis heterogramma* Meyrick**

Decadarchis heterogramma Meyrick, 1921, *Exot. Microlep.* 2 : 459.

ANEITYUM : Red Crest, 1,200 ft., iv and vi. 1955, 1 ♂, 3 ♀.

DISTRIBUTION. Fiji.

***Decadarchis flavistriata* (Walsingham)**

Ereunetis flavistriata Walsingham, 1907, *Fauna Hawaiiensis*, 1 pt. 5 : 716.

Decadarchis euophthalma Meyrick, 1924, *Exot. Microlep.* 3 : 83.

ANEITYUM : Red Crest, 1,200 ft., iv. 1955, 1 ♂.

DISTRIBUTION. Hawaiian Is., Solomon Is., Java, Malaya, Fiji, Marquesas, New Hebrides and Kermadec Is.

***Decadarchis synclera* sp. n.**

(Pl. 14, fig. 19)

♂, 16 mm. Labial palpus whitish, irrorated fuscous or fuscous-black exteriorly, beneath with long rough whitish hair-scales throughout, bristles dark brown. Head, thorax and tegula white, crown of head tinged light buff, base of thorax overlaid with fuscous or fuscous-black. Antenna whitish; scape diffusely irrorate fuscous; flagellum with weak greyish suffusion. Fore wing ochreous-white; a thick irregular diffuse fuscous-black streak from base of costa above middle to 2/3, lower edge biundulate; costal area above streak suffused fuscous; an elongate fuscous-black spot on costa at 3/4; a diffuse fuscous-black medial streak from end of cell to apex; some light fuscous speckling on dorsal and distal areas; a conspicuous small black apical spot; a well-defined fuscous-black marginal line from costa well before apex skirting apical spot and along termen; cilia ochreous-white, fuscous opposite apical spot. Hind wing greyish white; cilia concolorous.

Male genitalia : Pl. 27, figs. 3 and 4.

Holotype ♂, NEW HEBRIDES : Aneityum, Red Crest, 1,200 ft., 3 m. NE. of Anelgauhat, iv. 1955 (*L. E. Cheesman*). Genitalia slide 6525.

Paratype 1 ♂, same locality data, dated iii. 1955.

Very closely related to *D. ancostyla* Meyrick, which occurs in Samoa. The superficial differences between these two species are slight and difficult to elucidate because of the poor condition of the material examined, but the fore wing markings of the Samoan species are heavier. The differences in the male genitalia are also small, in *ancostyla* the ventral part of the valva is pointed at apex not rounded as in *synclera*, and the saccus is similarly tapered to a point and not rounded; and the dense, compact, cylindrical patch of cornuti are weaker and less sclerotized in *synclera*.

***Decadarchis capnographa* Meyrick**

Decadarchis capnographa Meyrick, 1928, *Exot. Microlep.* 3 : 402.

ANEITYUM : Red Crest, 1,200 ft., iii-vi. 1955, 2 ♂, 9 ♀.

DISTRIBUTION. New Hebrides.

***Decadarchis semifusca* Bradley**

Decadarchis semifusca Bradley, 1961, *Bull. Brit. Mus. (nat. Hist.)*, Ent. 10 : 165.

ANEITYUM : Red Crest, 1,200 ft., iii-vi. 1955, 1 ♂, 10 ♀.

DISTRIBUTION. Ontong Java Atoll (Solomons Group).

TINEIDAE***Gerontha captiosella* Walker**

Gerontha captiosella Walker, 1864, *List Lep. Ins. B.M.* 29 : 782.

ANEITYUM : Red Crest, 1,200 ft., iii-vi. 1955, 6 ♀.

DISTRIBUTION. Occurring throughout the Indo-Australian region.

***Tinea* sp.**

ANEITYUM : Red Crest, 1,200 ft., iii and vi. 1955, 2 ♂, 1 ♀.

These three specimens represent a species of unusual appearance but with typical male genitalia of the genus. All are in poor condition and have labial palpi and antennae damaged, and are therefore not considered suitable for descriptive purposes.





Bradley, J. D. 1962. "Microlepidoptera from the New Hebrides. Records and descriptions of Microlepidoptera collected on the Island of Aneityum by Miss Evelyn Cheesman, O.B.E." *Bulletin of the British Museum (Natural History) Entomology* 12, 247–271.

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