

PAPERS READ.

DESCRIPTIONS OF AUSTRALIAN MICRO-LEPIDOPTERA.

BY E. MEYRICK, B.A., F.E.S.

XII. ŒCOPHORIDÆ—(*Continued.*)

59. HAPLODYTA, Meyr.

Head smooth, sidetufts small, spreading. Antennæ in ♂ moderately ciliated (1), basal joint with strong pecten. Palpi moderate, second joint reaching base of antennæ, with appressed scales, somewhat loose beneath, terminal joint rather shorter than second, slender, recurved. Thorax smooth. Forewings elongate, hindmargin very oblique. Hindwings somewhat narrower than forewings, narrowly elongate-ovate, apex round-pointed, cilia  $1\frac{1}{4}$ . Abdomen moderate. Posterior tibiæ clothed with long fine hairs above. Forewings with vein 7 to hindmargin, 2 from somewhat before angle of cell. Hindwings normal.

Differs from *Machaeritis* by the second joint of palpi reaching base of antennæ, and the hindwings not acutely pointed, but otherwise nearly allied to it.

- |                          |                         |
|--------------------------|-------------------------|
| 1a. Head ochreous.....   | 401. <i>iochalca</i> .  |
| 1b. „ grey.              |                         |
| 2a. Thorax ochreous..... | 400. <i>heteropla</i> . |
| 2b. „ grey .....         | 399. <i>thoracta</i> .  |

399. *Hapl. thoracta*, n. sp.

Minor, alis ant. griseis, nitidis ; post. saturatius griseis ; capite ac thorace concoloribus griseis.



♂. 13-16 mm. Head, palpi, antennæ, thorax, abdomen, and legs rather dark shining bronzy-grey. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; shining bronzy-grey, finely irrorated with paler; extreme costal edge sometimes whitish towards middle: cilia light shining bronzy-grey. Hindwings rather dark grey; cilia grey.

Blackheath, New South Wales (3,500 feet); Fernshaw, Victoria; Deloraine, Tasmania; nine specimens in November and December.

400. *Hapl. heteropla*, n. sp.

Minor, alis ant. aereo-ochreis, nitidis; post. saturatius griseis; capite ac thorace discoloribus.

♂. 13-14 mm. Head, palpi, antennæ, abdomen and legs dark grey. Thorax shining bronze. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; shining ochreous-bronze; cilia light shining bronze. Hindwings rather dark grey; cilia grey.

Bathurst (2,300 feet), New South Wales; four specimens in November.

401. *Hapl. iochalca*, n. sp.

Minor, alis ant. ferrugineo-ochreis; post. saturate griseis; capite ac thorace concoloribus ochreis.

♂. 12-13 mm. Head and thorax yellow-ochreous, somewhat ferruginous-tinged. Palpi, antennæ, abdomen and legs grey. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; yellow-ochreous, ferruginous-tinged: cilia yellow-ochreous. Hindwings dark grey; cilia grey.

Mount Kosciusko (4,700 feet), New South Wales; Deloraine, Tasmania; two specimens in December and January.

60, MACHÆRITIS, Meyr.

Head smooth, sidetufts small, loosely appressed. Antennæ in ♂ somewhat serrate, moderately ciliated (1), basal joint with strong pecten. Palpi moderate or rather short, second joint not



reaching base of antennæ, with appressed scales, somewhat loose beneath, terminal joint shorter, slender, recurved. Thorax smooth. Forewings elongate, hindmargin very oblique. Hindwings narrower than forewings, ovate-lanceolate, apex acute, cilia  $1-1\frac{1}{2}$ . Abdomen moderate. Posterior tibiæ clothed with long hairs above. Forewings with vein 7 to hindmargin, 2 from before angle. Hindwings normal.

A development of *Cæsyra*, from which it is distinguished only by the different form of the hindwings, which are lanceolate instead of elongate-ovate, and the relatively broader cilia.

- 1a. Forewings with ground colour white.
- 2a. Markings ochreous.....405. *melanospora*.
- 2b. „ dark fuscous .....406. *samphoras*.
- 1b. Forewings with ground colour not white.
- 2a. Forewings with ground colour clear yellow .....402. *calligenes*.
- 2b. Forewings with ground colour not clear yellow.
- 3a. With two convergent dark streaks from inner margin .....403. *grammophora*.
- 3b. Without convergent dorsal streaks.
- 4a. With a well-defined dark spot at anal angle...404. *heniocha*.
- 4b. Without dark anal spot.
- 5a. Ground colour yellowish, mixed with light grey .....408. *hemera*.
- 5b. Ground colour whitish-ochreous, irrorated with dark fuscous.
- 6a. Costa suffused with dark fuscous towards base .....407. *psathyra*.
- 6b. Costa not suffused with dark fuscous.
- 7a. Forewings anteriorly clear whitish-ochreous .....409. *indocta*.
- 7b. Forewings evenly irrorated with dark fuscous throughout.....410. *aegrella*.



402. *Mach. calligenes*, n. sp.

Parva, alis ant. dilutius flavis, strigula aut maculis costæ ad basim, fasciis duabus, altera maculam flavam continente, tertia etiam marginis postici vix purpureis nigro-irroratis; post. saturatius griseis.

♂ ♀. 10-13 mm. Head and palpi light ochreous-yellow, palpi with lower half of second joint and sometimes base of terminal joint dark fuscous. Antennæ grey. Thorax light yellow, anterior half dark purplish-fuscous. Abdomen grey. Legs dark grey, posterior tibiæ and apex of joints ochreous-whitish. Forewings elongate, costa moderately arched, apex round-pointed, hind-margin very oblique, hardly rounded; ochreous-yellow; markings whitish-purplish, closely irrorated with black; a streak along basal fifth of costa, usually separated into two spots; a narrow slightly outwards-curved fascia from  $\frac{2}{5}$  of costa to middle of inner margin; a broader fascia, narrowed on costa, from  $\frac{3}{4}$  of costa to anal angle, containing a spot of ground colour in disc (sometimes open posteriorly); a narrow fascia along hindmargin from apex to below middle, attenuated beneath: cilia ochreous-yellow, on anal angle irrorated with purplish-black. Hindwings rather dark grey; cilia grey.

Appears to form a connecting link with *Cæsya*, to which it closely approaches.

Larva 16-legged, moderate, cylindrical; dull brownish-ochreous; dorsal vessel smoky-grey; head, second, and third segments black. Feeds in a portable case on lichen-dust on fences; case arch-like, both ends affixed to fence, forming a semicircular erect hoop; cylindrical, granulated with lichen-dust, mouths ragged and flapped; larva emerging at either end; feeds in August and September. This singular form of case is unique, so far as known to me.

Sydney, New South Wales; Fernshaw, Victoria; Launceston, Tasmania; Port Lincoln, South Australia; occurs tolerably commonly from October to January; the larva round Sydney in abundance.



403. *Mach. grammophora*, n. sp.

Parva, alis ant. albido-ochreis, strigula costæ basali, strigis ex dorso duabus in discum confluentibus, fascia postica bis interrupta, alteraque submarginali nigro-conspersis ; post. griseis.

♂ ♀. 9-10 mm. Head, palpi, and thorax whitish-ochreous ; palpi with second joint except apex, and base of terminal joint dark fuscous. Antennæ dark fuscous. Abdomen grey. Legs dark grey, ringed with whitish-ochreous. Forewings elongate, narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded ; whitish-ochreous, with some scattered black scales ; markings formed by an irroration of blackish scales ; a streak along basal  $\frac{2}{5}$  of costa, terminating in a dilated spot ; an outwardly oblique streak from inner margin at  $\frac{1}{3}$ , and an inwardly oblique streak from before anal angle, meeting in disc before middle ; a streak from  $\frac{2}{3}$  of costa to anal angle, more or less distinctly divided into three spots ; a streak near hindmargin from costa before apex to anal angle : cilia whitish-ochreous, basal half irrorated with dark fuscous. Hindwings grey ; cilia whitish-grey.

Sydney, New South Wales, in September, October and December ; rather common.

404. *Mach. heniocha*, n. sp.

Parva, alis ant. albido-ochreis, punctis disci tribus, macula parva costæ postica, alteraque dorsi ante angulum analem nigrescentibus ; post. griseo-albidis.

♂ ♀. 9-11 mm. Head, palpi, thorax, and abdomen whitish-ochreous ; palpi with second joint dark fuscous except towards apex. Antennæ grey. Legs whitish-ochreous, anterior pair dark grey. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin very obliquely rounded ; whitish-ochreous ; markings blackish ; a short streak on base of costa ; a dot in disc at  $\frac{2}{5}$ , a second almost beneath it on fold, and a third larger in disc at  $\frac{2}{3}$  ; a cloudy spot on costa beyond  $\frac{2}{3}$ , and



another on inner margin before anal angle ; traces of a transverse line near hindmargin : cilia whitish-ochreous. Hindwings and cilia grey-whitish.

Sydney, New South Wales, from September to March ; rather common.

405. *Mach. melanospora*, n. sp.

Parva, alis ant. albis, ochreo-sparsis, punctis disci tribus, quarto anguli analis, quinto costæ ante apicem ochreis ; post. albidogriseis.

♂ ♀. 10-14 mm. Head, palpi, antennæ, and thorax white ; palpi with second joint externally dark fuscous except at apex. Abdomen whitish. Legs grey, posterior pair whitish, tibiæ yellowish-tinged. Forewings elongate, rather narrow, costa moderately arched, apex tolerably pointed, hindmargin extremely oblique, hardly rounded ; white, more or less thinly irrorated with ochreous ; markings ochreous, ill-defined : a small spot in disc at  $\frac{1}{3}$ , a second obliquely beyond it on fold, and a third larger in disc at  $\frac{2}{3}$  ; a small spot on anal angle, tending to be connected with third discal spot ; a small spot on costa towards apex : cilia white, with two irregular lines of dark fuscous points. Hindwings whitish-grey ; cilia whitish.

Toowoomba, Queensland ; Sydney, New South Wales, in December and March ; rather common.

406. *Mach. samphoras*, n. sp.

Parva, alis ant. canis, dorsum versus griseo-suffusis, punctis disci quattuor, macula costæ post medium, striga anguli analis, lineaque postica transversa sub apicem suffusa saturatius fuscis ; post. griseis.

♂ ♀. 11-14 mm. Head white. Palpi white, second joint dark fuscous. Antennæ grey. Thorax white mixed with grey. Abdomen grey. Legs grey, posterior pair paler. Forewings elongate, narrow, costa moderately arched, apex round-pointed, hindmargin extremely oblique, hardly rounded ; white, dorsal half suffused with light grey ; markings dark fuscous, rather ill-defined ; a small spot in disc at  $\frac{1}{3}$ , a second obliquely beyond it on



fold, a third in disc above middle, and a fourth in disc at  $\frac{2}{3}$ , connected with anal angle by a rather thick streak; an elongate spot along costa about  $\frac{2}{3}$ , tending to connect inwards with third discal spot; a curved line from costa near apex to anal angle, sharply indented inwards beneath costa, connected with a cloudy apical suffusion: cilia white, with two or three cloudy series of fuscous points. Hindwings grey; cilia grey-whitish.

Murrurundi and Sydney, New South Wales; Campbelltown, Tasmania; locally rather common, from September to December.

407. *Mach. psathyra*, n. sp.

Parva, alis ant. dilutius ochreis, saturate fusco-irroratis, costæ basi saturate fusco-suffusa, maculis disci tribus saturate fuscis; post. griseis.

♂. 10-12 mm. Head light ochreous. Palpi whitish-ochreous, second joint dark fuscous. Antennæ fuscous. Thorax light ochreous, mixed with dark fuscous. Abdomen fuscous. Legs dark fuscous, ringed with pale ochreous, posterior tibiæ pale ochreous. Forewings elongate, rather narrow, costa moderately arched, apex tolerably pointed, hindmargin extremely obliquely rounded; pale brownish-ochreous, coarsely irrorated with dark fuscous; base of costa suffused with dark fuscous; three small round dark fuscous spots, first in middle of disc, second on fold rather before first, third in disc at  $\frac{3}{4}$ : cilia pale greyish-ochreous irrorated with dark fuscous. Hindwings rather dark grey; cilia light grey, ochreous-tinged.

This and the three following species are closely allied; *M. psathyra* may be known by the more ochreous ground colour, coarser irroration, and marked dark suffusion of base of costa, with the darker hindwings.

Hobart, Tasmania (1000 feet), in December; five specimens.

408. *Mach. hemera*, n. sp.

Parva, alis ant. flavidis, suffuse griseo-mixtis; post. griseis.

♂. 11-12 mm. Head light yellowish mixed with grey. Palpi, antennæ, thorax, abdomen, and legs rather dark grey. Forewings elongate, rather narrow, costa moderately arched, apex



tolerably pointed, hindmargin extremely obliquely rounded; ochreous-yellowish, mixed and suffused with light fuscous-grey: cilia yellowish, mixed with light grey. Hindwings grey: cilia whitish-grey.

Readily recognised by the mixed yellowish and grey ground-colour and absence of markings.

Port Lincoln, South Australia; two specimens in November.

409. *Mach. indocta*, n. sp.

Parva, alis ant. albido-ochreis, partim fusco-irroratis, punctis disci tribus obscuris saturate fuscis; post. albido-griseis; antennis annulatis.

♂ ♀. 10-13 mm. Head, palpi, antennæ, thorax, abdomen, and legs whitish-ochreous; antennæ annulated with dark fuscous; anterior and middle legs banded with dark fuscous. Forewings elongate, narrow, costa moderately arched, apex acute, hindmargin extremely oblique, slightly rounded; whitish-ochreous, posteriorly finely irrorated with light fuscous; three obscure dark fuscous dots, sometimes obsolete, first in middle of disc, second on fold rather before first, third in disc at  $\frac{3}{4}$ : cilia pale whitish-ochreous, finely irrorated with fuscous. Hindwings whitish-grey; cilia ochreous-whitish.

Very like the following, but the whitish-ochreous ground colour much clearer towards base, the hindwings lighter, and specially characterised by the annulated antennæ.

Brisbane, Queensland; rather common in September.

410. *Mach. aegrella*, n. sp.

Parva, alis ant. albido-ochreis, saturatius fusco-irroratis, punctis disci tribus obscuris saturate fuscis; post. griseis.

♂ ♀. 11-13 mm. Head, palpi, thorax, and abdomen pale whitish-ochreous, somewhat fuscous-tinged. Antennæ grey. Legs dark fuscous, ringed with whitish-ochreous, posterior tibiæ whitish-ochreous. Forewings elongate, narrow, costa moderately arched, apex acute, hindmargin extremely obliquely rounded; pale



whitish-ochreous, greyish-tinged, closely irrorated with fuscous-grey; three obscure dark fuscous dots, first in middle of disc, second on fold rather before first, third in disc at  $\frac{3}{4}$ : cilia pale whitish-ochreous, irrorated with fuscous-grey. Hindwings grey; cilia ochreous-whitish, greyish-tinged.

Variable in intensity of irroration, but always much greyer than the preceding.

Sydney, Blackheath (3,500 feet), and Bathurst (2,100 feet), New South Wales; Deloraine, Campbelltown, George's Bay and Hobart, Tasmania; Wirrabara and Port Lincoln, South Australia; generally very common from August to January.

#### 61. ACHLETA, Meyr.

The characters of this and the other endemic New Zealand genera are given in full in Trans. N. Z. Inst., 1883, and need not be repeated.

##### 411. *Achl. psychra*, Meyr.

(*Achleta psychra*, Meyr. Trans. N. Z. Inst., 1883, 21.)

Media, alis ant. albidis, griseo-sparsis, postice partim griseo-suffusis, punctis disci duobus minimis ocelloque nigris; post. albidis.

Castle Hill, New Zealand.

#### 62. SEMIICOSMA, Meyr.

##### 412. *Sem. peroneanella*, Walk.

(*Gelechia peroneanella*, Walk.. 658; *Cryptolechia lichenella*, ib. 769; *Oecophora Huttonii*, Butl., Cist. Ent. II, 511; *Semiocosma peroneanella*, Meyr., Trans. N. Z. Inst., 1883, 22.)

Media, alis ant. dilute viridibus, signis plerisque contortis serieque punctorum marginis postici nigris; post. albidis, apicem versus griseis.

Hamilton to Dunedin, New Zealand, in December and January.

##### 413. *Sem. picarella*, Walk.

(*Oecophora picarella*, Walk. 699; *Psecadia teras*, Feld. pl. CXL., 28; *Semiocosma picarella*, Meyr., Trans. N. Z. Inst., 1883, 23.)



Major, alis ant. niveis, strigis tribus transversis contortis, signis duobus posticis serieque punctorum marginis postici nigris ; post. griseis, disco albido-suffuso.

Dunedin, New Zealand, in January.

414. *Sem. attactella*, Walk.

(*Izatha attactella*, Walk. 787 ; *Semiocosma attactella*, Meyr., Trans. N. Z. Inst., 1883, 46.)

Major, alis ant. albidis, griseo-sparsis, vitta interrupta nigra, signis disci plerisque serieque punctorum marginis postici saturate fuscis ; post. dilute griseis.

New Zealand.

415. *Sem. copiosella*, Walk.

(*Gelechia copiosella*, Walk. 1028 ; *Semiocosma copiosella*, Meyr., Trans. N. Z. Inst., 1883, 47.)

Media, alis ant. nigrescentibus, cinereo-nebulosis ; post. saturate fuscis.

Auckland, New Zealand.

416. *Sem. epiphanes*, Meyr.

(*Semiocosma epiphanes*, Meyr., Trans. N. Z. Inst., 1883, 24.)

Media, alis ant. canis, griseo-conspersis, macula basali postice angulata alteraque costæ magna signis nigris notata saturate fuscis ; post. griseo-albidis.

Wellington, New Zealand, in January.

417. *Sem. prasophyta*, Meyr.

(*Semiocosma prasophyta*, Meyr., Trans. N. Z. Inst., 1883, 25.)

Media, alis ant. canis, virescenti-suffusis, strigula ad basim, squamis disci sparsis, punctis costæ lineaque marginis postici nigris ; post. griseis, basim versus albidis.

Taranaki and Wellington, New Zealand, in January and February.

418. *Sem. austera*, Meyr.

*Semiocosma austera*, Meyr., Trans. N. Z. Inst., 1883, 25.)



Media, alis ant. fuscis, fascia antica lineaque postica curva vix pallidioribus, signo disci arcuato saturatiori; post. saturate fuscis.

Wellington, New Zealand, in January.

63. LEPTOCROCA, Meyr,

Head with appressed scales, sidetufts moderate, roughly spreading. Antennæ in ♂ with long fine cilia (4), basal joint rather elongate, with strong pecten. Palpi long, second joint somewhat exceeding base of antennæ, thickened with dense appressed scales, slightly loose beneath, terminal joint shorter than second, moderate, recurved. Thorax smooth. Forewings elongate, hindmargin oblique. Hindwings as broad as forewings, elongate-ovate, cilia  $\frac{1}{2}$ . Abdomen moderate. Posterior tibiæ clothed with long hairs above. Forewings with vein 7 to costa, 2 from angle of cell. Hindwings normal.

Distinguished from its nearest allies by the very long ciliation of antennæ in ♂.

419. *Lept. sanguinolenta*, n. sp.

Major, alis ant. carneis, vitta supra medium inferius tridentata, lineaque submarginali nigrescentibus; post. griseo-albidis.

♂ ♀. 23-28 mm. Head and thorax flesh-colour. Palpi reddish-whitish, terminal joint and basal half of second externally dark fuscous. Antennæ dark fuscous. Abdomen grey-whitish. Legs dark fuscous, posterior pair and apex of joints grey-whitish. Forewings elongate, costa moderately arched, apex round-pointed, hindmargin very oblique, hardly rounded; flesh-colour, somewhat irrorated with grey; a thick irregular blackish streak above middle from base to apex, above more or less suffused, beneath with three short irregular projections at  $\frac{1}{4}$ , before middle, and at  $\frac{2}{3}$ ; a submarginal interrupted blackish line, sometimes indistinct: cilia light flesh-colour. Hindwings and cilia grey-whitish.

A conspicuously distinct species.



Newcastle and Sydney, New South Wales; Melbourne, Victoria; six specimens in June and July, principally at lamps.

63.\* LATHICROSSA, Meyr.

420. *Lath. leucocentra*, Meyr.

(*Lathicrossa leucocentra*, Meyr., Trans. N. Z. Inst., 1883, 26.)

Minor, alis ant. saturate fuscis, maculis costæ duabus parvis serieque punctorum marginis postici albido-ochreis, punctis disci tribus niveis; post. saturate fuscis.

Dunedin, New Zealand, in January.

63.\*\* THAMNOSARA, Meyr.

421. *Thamn. chirista*, Meyr.

(*Thamnosara chirista*, Meyr., Trans. N. Z. Inst., 1883, 27.)

Minor, alis ant. albido-fuscis, saturate fusco creberrime irroratis; post. griseis.

Christchurch, New Zealand, in December.

64. GYMNOBATHRA, Meyr.

422. *Gymn. coarctatella*, Walk.

(*Cryptolechia coarctatella*, Walk. 768; *Gymnobathra coarctatella*, Meyr., Trans. N. Z. Inst., 1883, 28.)

Media, alis ant. rufo-ochreis, punctis disci tribus saturate griseis interdum obsoletis; post. ochreo-albidis, basim versus griseo-suffusis; ♀ alis abbreviatis.

Wellington to Dunedin, New Zealand, in January.

423. *Gymn. sarcoxantha*, Meyr.

(*Gymnobathra sarcoxantha*, Meyr., Trans. N. Z. Inst., 1883, 29.)

Media, alis ant. dilute ochreis, punctis disci tribus saturate ochreo-fuscis; post. ochreo-albidis.

Christchurch to Dunedin, New Zealand, in January and March.



424. *Gymn. parca*, Butl.

(*Ecophora parca*, Butl., Proc. Zool. Soc., Lond., 1877, 405 ; *Ecophora limbata*, Butl., Cist. Ent. II., 560 ; *Gymnobathra parca*, Meyr., Trans. N. Z. Inst., 1883, 29.)

Minor, alis ant. ochreis vel flavis, interdum griseo-mixtis, costa pallidiori, punctis disci tribus saturate griseis sæpius obsoletis ; post. griseis.

I have lately seen Butler's original types of *Ec. limbata*, which are certainly a common form of this species ; his description is exaggerated.

Wellington to Lake Wakatipu, New Zealand, in December and January.

425. *Gymn. tholodella*, Meyr.

(*Gymnobathra tholodella*, Meyr., Trans. N. Z. Inst., 1883, 30.)

Minor, alis ant. fuscis, ochreo-conspersis, punctis disci tribus saturatioribus ; post. griseis.

Hamilton to Dunedin, New Zealand, from January to March.

426. *Gymn. calliploca*, Meyr.

(*Gymnobathra calliploca*, Meyr., Trans. N. Z. Inst., 1883, 30.)

Minor, alis ant. albido-ochreis, fusco-sparsis, punctis disci tribus, costæ quinque posticis serieque marginis postici saturate fuscis ; post. dilute griseis.

Dunedin, New Zealand, in January,

427. *Gymn. flavidella*, Walk.

(*Gelechia flavidella*, Walk. 655 ; *Ecophra utuella*, Feld. pl. CXL, 46 ; *Gymnobathra flavidella*, Meyr, Trans. N. Z. Inst., 1883, 31.)

Minor, alis ant. dilute flavis, punctis disci tribus nigricantibus, triangulo marginis postici inferiori dilute fusco, antice nigro-marginato, umbramque costam versus emittente, ciliis fuscis ; post. albis, postice roseo-griseis.



Auckland to Christchurch, New Zealand, in January and February.

428. *Gymn. hamatella*, Walk.

(*Æcophora hamatella*, Walk. 700; *Gymnobathra hamatella*, Meyr., Trans. N. Z. Inst., 1883. 31.)

Minor, alis ant. albido-ochreis, interdum ochreo-suffusis, fusco-sparsis, linea transversa antica recta, altera postica angulata, punctis disci duobus strigulaque transversa, ciliis etiam saturate fuscis; post. ♂ griseis, ♀ albidis.

Christchurch and Akaroa, New Zealand, from January to March.

429. *Gymn. hyetodes*, Meyr.

(*Gymnobathra hyetodes*, Meyr., Trans. N. Z. Inst., 1883, 32.)

Media, alis ant. ♂ fuscis, ♀ ochreo-flavis, punctis disci tribus obscuris fasciaque postica recta nebulosa saturatoribus; post. ♂ saturate griseis, ♀ ochreo-flavis.

Wellington, New Zealand, in February.

430. *Gymn. philadelpha*, Meyr.

(*Gymnobathra philadelpha*, Meyr., Trans. N. Z. Inst., 1883, 33.)

Media, alis ant. griseis, leviter albido-sparsis, ciliorum apice albo; post. griseo-albidis, apice leviter griseo.

Mount Hutt, New Zealand, in January.

65. *ÆCOPHORA*, Z.

Head smooth, sidetufts moderate, loosely appressed. Antennæ in ♂ somewhat serrate, moderately and evenly ciliated (1), basal joint moderate, with strong pecten. Palpi moderate, second joint not exceeding base of antennæ, with appressed scales, somewhat loose beneath, terminal joint shorter than second, moderate, curved. Thorax smooth. Forewings elongate, hindmargin very oblique. Hindwings somewhat narrower than forewings, elongate-ovate, cilia  $\frac{2}{3}$ -1. Abdomen moderate, sometimes somewhat flattened. Posterior tibiæ clothed with long fine hairs. Forewings with vein 7 to costa, 2 from or somewhat before angle of cell, rarely stalked with 3. Hindwings normal.



Although this is the principal genus of the family in New Zealand and Europe, and probably elsewhere, it does not occupy a prominent position in Australia, where it is notwithstanding fairly represented. In the following tabulation the New Zealand species, which form a connected group not specifically allied to Australian forms, are not included, as they have been separately tabulated elsewhere.

- 1a. Forewings without discal dots.
- 2a. Costa white ... ..446. *eurrhoa*.
- 2b. „ not white.
- 3a. Forewings yellow.....431. *hemisphaerica*.
- 3b. „ grey.....445. *poliocrana*.
- 1b. Forewings with discal dots.
- 2a. Face clear white.....438. *eremæa*.
- 2b. Not white.
- 3a. Head fuscous or grey.
- 4a. Second discal spot directly beneath first...442. *epimicta*.
- 4b. „ „ „ obliquely before first...439. *zophodes*.
- 3b. Head whitish-ochreous or yellowish.
- 4a. Head mixed with reddish-fuscous.....434. *uniformis*.
- 4b. „ not mixed with fuscous.
- 5a. Hindwings yellow-ochreous.....436. *hypochalca*.
- 5b. „ not ochreous.
- 6a. Forewings clear whitish-ochreous, with  
dark markings.
- 7a. Thorax posteriorly whitish-ochreous.....443. *sulfurea*.
- 7b. „ wholly dark fuscous. ....432. *anthemodes*.
- 6b. Forewings not whitish-ochreous.
- 7a. Forewings dark fuscous, with whitish  
ochreous spots.....444. *lychnosema*.
- 7b. Forewings not dark fuscous.
- 8a. Anterior half of costa broadly whitish-  
ochreous .....433. *ochroma*.
- 8b. Anterior half of costa not whitish-  
ochreous.
- 9a. Basal third of costa dark grey.



- 10a. Second discal spot obliquely before first,  
confluent .....440. *nubifera*.  
10b. Second discal spot slightly beyond first...441. *lymphatica*.  
9b. Basal third of costa not dark grey.....437. *lagara*.

431. *Oec. hemisphaerica*, n. sp.

Parva, alis ant. ochreo-flavis, fascia post medium perangusta fere recta serieque punctorum submarginali nigrescentibus; post. griseis.

♂ ♀. 11-12 mm. Head ochreous-yellow. Palpi yellow, lower half of second joint dark fuscous. Antennæ dark fuscous. Thorax dark purplish-fuscous. Abdomen yellowish, above greyish-tinged. Legs dark fuscous, posterior pair and apex of joints yellowish. Forewings elongate, costa moderately arched, apex rounded, hindmargin very obliquely rounded; rather deep ochreous-yellow; a very small blackish spot at base of costa; a slender almost straight, slightly outwards-curved, blackish fascia from  $\frac{3}{5}$  of costa to inner margin before anal angle, beyond this a faint brownish suffusion; an indistinct curved line of blackish dots very near hindmargin: cilia ochreous-yellow. Hindwings grey; cilia whitish-grey.

Brisbane, Queensland; rather common in September.

432. *Oec. anthemodes*, n. sp.

Parva, alis ant. albido-ochreis, basi saturate fusca, nebula dorsi antica, fascia etiam postica obliqua cum altera marginis postici inferius connexa dilutius fuscis, punctis disci his impositis duobus saturate fuscis; post. saturatius griseis.

♂ ♀. 9-12 mm. Head whitish-ochreous. Palpi whitish-ochreous, second-joint externally dark fuscous except at apex. Antennæ dark fuscous. Thorax dark purplish-fuscous. Abdomen grey. Legs dark fuscous, apex of joints and posterior pair whitish-ochreous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin very obliquely rounded; whitish-ochreous; base of wing narrowly dark purplish-fuscous; a cloudy dark fuscous dot on fold before middle, connected with



inner margin by an obscure brownish-ochreous cloud ; a triangular fuscous spot on costa beyond middle, its apex touching a cloudy brownish-ochreous patch on anal angle, which generally extends along hindmargin to apex ; a dark fuscous dot in this patch in disc beyond middle : cilia whitish-ochreous, more or less suffused with pale greyish. Hindwings rather dark grey ; cilia grey.

Fernshaw and Warragul, Victoria ; Mount Wellington (1100 feet), Tasmania ; locally rather common, from November to January.

433. *Oec. ochroma*, n. sp.

Parva, alis ant. dilutius fuscis, saturatiori-irroratis, dimidio costæ antico lætius albido-ochreo, punctis disci quattuor, duobus costæ posticis albido-ochreo disjunctis, serie etiam submarginali nigrescentibus ; post. dilute griseis.

♂ ♀. 10-15 mm. Head, palpi, and antennæ whitish-ochreous ; basal half of second joint of palpi dark fuscous. Thorax fuscous, shoulders whitish-ochreous. Abdomen whitish-grey. Legs dark grey, posterior tibiæ and apex of joints whitish-ochreous. Forewings elongate, costa moderately arched, apex rounded, hindmargin rather strongly oblique, rounded ; light fuscous, irrorated with dark fuscous ; a dark fuscous spot on base of costa ; a moderately broad whitish-ochreous streak along basal half of costa, lower edgetwice sinuate, sinuations filled with dark fuscous ; a cloudy dark fuscous spot on costa beyond middle, and another at  $\frac{4}{5}$ , between which is a cloudy whitish-ochreous spot ; four cloudy dark fuscous discal spots, first before middle, second on fold directly beneath first but more obscure, third above middle, fourth beyond middle ; a curved series of obscure dark fuscous spots very near hindmargin : cilia whitish-fuscous, towards tips more whitish. Hindwings pale grey ; cilia grey-whitish.

Sydney, New South Wales, in March and June ; eight specimens on a fence.

434. *Oec. uniformis*, n. sp.

Media, alis ant. albido-ochreis. rufescenti-conspersis, punctis disci duobus obscuris saturatius fuscis, linea postica angulata obscura rufescenti ; post. dilute griseis.



♀. 19 mm. Head and thorax whitish-ochreous, mixed with reddish-fuscous. Palpi whitish-ochreous, terminal joint and apex of second suffused with dark fuscous. Antennæ whitish-ochreous, finely annulated with dark fuscous. Abdomen whitish-grey. Legs whitish-ochreous, ringed with grey. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin very obliquely rounded; whitish-ochreous, densely irrorated with reddish-fuscous; an obscure dark reddish-fuscous dot in disc before middle, and a second beyond middle; a very obscure angulated darker posterior transverse line: cilia whitish-ochreous, densely irrorated with reddish-fuscous. Hindwings pale grey; cilia grey-whitish.

Bathurst (2,400 feet) and Mount Canobolas (4,000), New South Wales; two specimens in April.

435. *Oec. pseudopretella*, Stt.

Media, alis ant. ochreis, saturate fusco conspersis, maculis disci tribus parvis serieque postica submarginali saturate fuscis; post. dilute griseis.

A well-known species, of which the larva feeds in skins, seeds, dry refuse, &c.

Glen Innes (3,000 feet), Bathurst (2,300 feet), Blackheath (3,500 feet), and Cooma (2,500 feet), New South Wales; Melbourne, Victoria; Launceston, Campbelltown, George's Bay and Hobart, Tasmania; Mount Graham and Port Lincoln, South Australia; Hamilton to Dunedin, New Zealand; common in houses, from November to March; introduced from Europe.

436. *Oec. hypochalca*, n. sp.

Minor, alis ant. albido-luteis, marginibus omnibus strigisque duabus posticis obliquis obscure ochreis; post. flavescentibus.

♂ ♀. 13-17 mm. Head and thorax whitish-ochreous, bronzy-tinged. Palpi and antennæ fuscous. Abdomen pale ochreous. Legs fuscous, posterior tibiæ yellowish. Forewings elongate, rather narrow, costa moderately arched, apex acute, hindmargin extremely oblique, straight or somewhat sinuate; very pale whitish-



yellowish; markings very cloudy, brownish-ochreous, bronzy-shining, forming an obscure suffusion towards all margins, and two inwardly oblique streaks in disc about middle and  $\frac{3}{4}$ , terminating in marginal suffusion: cilia pale bronzy-ochreous. Hindwings and cilia yellow-ochreous, fuscous-tinged.

Sydney, New South Wales; several specimens in February and March.

437. *Oec. lagara*, n. sp.

Parva, alis ant. ochreo-albidis, griseo-mixtis, punctis disci circiter quinque, costæ etiam duobus posticis saturate griseis; post. dilutius griseis.

♂. 11-13 mm. Head very pale whitish-ochreous. Palpi whitish, second joint dark grey. Antennæ grey. Thorax grey-whitish, mixed with grey. Abdomen whitish-grey. Legs dark grey, posterior pair and apex of joints ochreous-whitish. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin somewhat sinuate, extremely oblique; ochreous-whitish, irregularly irrorated with grey; markings dark grey, ill-defined; a small round spot in disc at  $\frac{1}{3}$ , a second obliquely before it beneath fold, a third on fold obliquely beyond first, sometimes an additional one above third, a fourth beneath and beyond middle of disc, a fifth obliquely beyond and above fourth; two cloudy spots on costa at  $\frac{3}{5}$  and  $\frac{4}{5}$ : cilia ochreous-grey-whitish. Hindwings light grey; cilia ochreous-whitish.

Rosewood, Queensland; Sydney, New South Wales; several specimens, from October to December.

438. *Oec. eremæa*, n. sp.

Minor, alis ant. acutis, griseis, cano-sparsis, punctis disci tribus obscuris saturatoribus; post. griseis; capite cano.

♂. 14-16 mm. Head white, sometimes with a grey spot on crown. Palpi dark grey, terminal joint mixed with whitish. Antennæ white, sharply annulated with dark grey. Thorax dark grey, patagia mixed with white. Abdomen grey. Legs dark grey, hairs of posterior tibiæ ochreous-whitish. Forewings elongate, rather narrow, costa gently arched, apex acute, hind-



margin somewhat sinuate, extremely oblique; fuscous-grey, irrorated with white; three small cloudy somewhat darker spots, first in disc at  $\frac{1}{3}$ , second on fold directly beneath first, third in disc at  $\frac{2}{3}$ : cilia whitish-grey. Hindwings grey; cilia grey-whitish, with a cloudy grey line near base.

Toowoomba (2,000 feet), Queensland; Glen Innes (3,500 feet), New South Wales; Mount Wellington (2,500 feet), Tasmania; several specimens in December and January.

439. *Oec. zophodes*, n. sp.

Media, alis ant. acutis, griseis, punctis disci tribus lineaque postica sinuata obscuris saturationibus, tertio duplici; post. dilutius griseis; capite griseo.

♀. 20-21 mm. Head, palpi, antennæ, thorax, abdomen, and legs fuscous-grey; hairs of posterior tibiæ ochreous-whitish. Forewings elongate, rather narrow, costa moderately arched, apex acute, hindmargin somewhat sinuate, extremely oblique; fuscous-grey, with a few whitish and dark fuscous scales; markings cloudy darker fuscous, very indistinct; a spot in disc at  $\frac{1}{3}$ , a second on fold obliquely before and suffusedly connected with first, and a third in disc at  $\frac{2}{3}$ , transversely double and more blackish; a transverse line from  $\frac{3}{4}$  of costa to anal angle, sinuate inwards beneath costa: cilia pale fuscous. Hindwings light grey; cilia paler.

Blackheath (3,500 feet), New South Wales; two specimens in November.

440. *Oec. nubifera*, n. sp.

Minor, alis ant. griseis, ochreo-albido conspersis, fascia antica angusta, macula costæ post medium, punctis disci duobus lineaque postica superius indentata saturate griseis; post. griseis; capite albido-ochreo.

♂ ♀. 16-17 mm. Head whitish-ochreous. Palpi dark grey, somewhat mixed with whitish. Antennæ grey. Thorax rather dark grey. Abdomen grey. Legs dark grey, hairs of posterior tibiæ whitish. Forewings elongate, rather narrow, costa moderately arched, apex acute, hindmargin hardly rounded, extremely



oblique; grey, densely irrorated or suffused with ochreous-whitish; markings cloudy, dark grey; a streak along costa and inner margin towards base; a narrow inwardly oblique fascia about  $\frac{2}{5}$ , tending to be interrupted into two spots in disc; a short indistinct inwardly oblique streak from costa at  $\frac{3}{5}$ ; a small spot below middle of disc, and another in disc at  $\frac{2}{3}$ ; a thick cloudy line from costa near apex to anal angle, sharply indented beneath costa: cilia light grey. Hindwings grey; cilia light grey.

Glen Innes (3,500 feet), New South Wales; two specimens in December.

441. *Oec. lymphatica*, n. sp.

Minor, alis ant. griseis, ochreo-albido conspersis, costæ dimidio antico, punctis disci tribus quattuorve, striga anguli analis, macula costæ post medium, lineaque postica superius indentata saturate fuscis, macula costæ ante lineam posticam ochreo-albida; post. griseis; capite albido-ochreo.

♂ ♀. 14-18 mm. Head pale ochreous or whitish-ochreous. Palpi dark fuscous, terminal joint ochreous-whitish. Antennæ, thorax, abdomen, and legs fuscous-grey; hairs of posterior tibiae ochreous-whitish. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin hardly rounded, extremely oblique; fuscous-grey, irrorated or partially suffused with ochreous-whitish; markings cloudy, dark fuscous; a streak along basal half of costa; a small spot in disc at  $\frac{1}{3}$ , a second on fold somewhat beyond first, and a third in disc at  $\frac{2}{3}$ , connected by a streak with anal angle; a fourth less distinct above fold near anal angle; an inwardly oblique spot from costa at  $\frac{2}{3}$ ; an ochreous-whitish costal spot beyond this; a thick line from costa at  $\frac{5}{8}$  to anal angle, indented beneath costa: cilia light fuscous-grey. Hindwings grey; cilia pale grey.

Bowenfels (2,500 feet), and Mount Kosciusko (4,300 feet), New South Wales; Deloraine and Hobart, Tasmania; rather common from November to January.



442. *Oec. epimicta*, n. sp.

Parva, alis ant. dilutius fuscis, saturatori-irroratis, punctis disci tribus saturate fuscis ; post. dilute griseis ; capite fusco.

♂. 12-13 mm. Head, palpi, antennæ, and thorax light fuscous, mixed with dark fuscous. Abdomen light grey. Legs dark fuscous, apex of joints and posterior pair pale greyish-ochreous. Forewings elongate, costa moderately arched, apex rounded, hindmargin very obliquely rounded ; light fuscous, irrorated with dark fuscous ; a small dark fuscous spot in disc before middle, a second on fold directly beneath first, and a third in disc at  $\frac{2}{3}$  : cilia pale greyish, with one or two cloudy dark fuscous lines. Hindwings pale grey ; cilia grey-whitish.

Deloraine, Tasmania ; five specimens in November.

443. *Oec. sulfurea*, n. sp.

Minor, alis ant. sulfureis, fascia ad basim, triangulo dorsi medio, striga intus perobliqua costæ postica, signo anguli analis, macula apicis, punctis etiam disci quattuor cum his partim conjunctis saturate griseis ; post. saturatius griseis.

♂ ♀. 14-19 mm. Head and palpi pale ochreous-yellow, palpi with lower half of second joint dark fuscous. Antennæ dark fuscous. Thorax dark purplish-fuscous, posterior margin whitish-ochreous. Abdomen grey. Legs dark grey, hairs of posterior tibiæ pale yellowish. Forewings elongate, rather narrow, costa gently arched, apex tolerably pointed, hindmargin extremely obliquely rounded ; whitish-ochreous, yellowish-tinged ; markings dark grey ; a straight rather narrow blackish-grey fascia almost at base ; an irregular dot in disc at  $\frac{1}{3}$ , a second on fold directly beneath first, and two transversely placed and generally confluent in disc at  $\frac{2}{3}$  ; a triangular blotch on middle of inner margin, its apex touching second discal dot ; an elongate spot along costa about  $\frac{2}{3}$ , sometimes anteriorly produced into a streak reaching first discal dot ; an irregular streak from third discal dot to anal



angle; a somewhat angular apical blotch, produced along hind-margin as a narrow streak to dorsal blotch: cilia grey. Hindwings rather dark grey; cilia whitish-ochreous.

Sydney, New South Wales; Adelaide and Port Lincoln, South Australia; Albany, West Australia; locally common in October and November.

444. *Oec. lychnosema*, n. sp.

Parva, alis ant. saturate fuscis, basi, puncto disci post medium, maculaque costæ postica transversa luteis; capite luteo.

♂. 11-12 mm. Head and palpi pale yellowish-ochreous, base of palpi dark fuscous. Antennæ dark fuscous. Thorax pale yellowish-ochreous, anterior margin broadly dark fuscous. Abdomen dark grey. Legs dark grey, apex of joints and hairs of posterior tibiæ whitish-ochreous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin very obliquely rounded; grey, densely irrorated with dark fuscous, purplish-tinged; markings pale yellowish-ochreous; a narrow basal spot; a small spot in disc beyond middle; a moderately large transverse spot from costa at  $\frac{3}{4}$ , reaching more than half across wing: cilia grey, irrorated with dark fuscous. Hindwings rather dark grey; cilia grey.

Sydney, New South Wales; George's Bay, Tasmania; four specimens, from November to January.

445. *Oec. poliocrana*, n. sp.

Minor, alis ant. dilute griseis, fusco-irroratis; post. griseo-albidis; capite ochreo-albido.

♂. 13-15 mm. Head and palpi ochreous-whitish, second joint of palpi suffused with dark fuscous except at apex. Antennæ fuscous. Thorax pale grey. Abdomen grey-whitish. Legs dark fuscous, posterior pair and apex of joints ochreous-whitish. Forewings elongate, narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; pale grey, irrorated with fuscous: cilia grey-whitish, irrorated with fuscous. Hindwings and cilia grey-whitish.

Blackheath (3,500 feet), New South Wales; common in October.



446. *Oec. eurrhoa*, n. sp.

Minor, alis ant. ochreis, costa anguste nivea; post. albido-griseis, apice ochreo-tincto.

♂ ♀. 15-17 mm. Head white, crown more or less ochreous-grey. Palpi white, second joint mixed with ochreous and grey, terminal joint anteriorly grey. Antennæ whitish. Thorax brownish-ochreous. Abdomen ochreous-whitish. Legs dark grey, posterior pair ochreous-whitish. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; yellowish-ochreous; a narrow white streak along costa from base to  $\frac{4}{5}$ : cilia whitish-ochreous. Hindwings very pale whitish-grey, apex suffused with whitish-ochreous; cilia very pale whitish-ochreous.

Sydney, Blackheath (3,500 feet), and Bathurst (2,300 feet), New South Wales; Launceston, Tasmania; rather common from January to April.

447. *Oec. scholæa*, Meyr.

(*Oecophora scholæa*, Meyr., Trans. N. Z. Inst., 1883, 35.)

Media, alis ant. dilute griseis, rufescenti-conspersis, maculis costæ tribus anticis, punctis disci duobus, tertio plicæ post primum disci posito, lineaque postica transversa angulata saturate fuscis; post. griseis.

Wellington to Invercargill, New Zealand, from December to February.

448. *Oec. letharga*, Meyr.

(*Oecophora letharga*, Meyr., Trans. N. Z. Inst., 1883, 35.)

Minor, alis ant. albido-griseis, fusco-conspersis, maculis costæ tribus anticis nebulosis, punctis disci duobus, tertio plicæ ante primum disci posito, lineaque postica transversa angulata saturate fuscis; post. griseis.

Dunedin, New Zealand, in January.

449. *Oec. chloritis*, Meyr.

(*Oecophora chloritis*, Meyr., Trans. N. Z. Inst., 1883, 36.)



Minor, alis ant. albido-flavidis, costæ basi ac puncto sub plica posito nigris, fascia antica angusta plicam non superante, linea anguli analis obliqua, lineaque transversa postica obsoleta griseis; post griseis.

Lake Wakatipu, New Zealand, in December.

450. *Oec. epimylia*, Meyr.

(*Oecophora epimylia*, Meyr., Trans. N. Z. Inst., 1883, 36.)

Minor, alis ant. dilute griseis, maculis costæ tribus, quarta plicæ, punctisque disci duobus obscuris saturatoribus; post. griseis; capite griseo.

Castle Hill, New Zealand, in January.

451. *Oec. contextella*, Walk.

(*Gelechia contextella*, Walk. 656; *Oecophora contextella*, Meyr., Trans. N. Z. Inst., 1883, 37.)

Minor, alis ant. canis, griseo-sparsis, fascia ad basim, altera post medium, maculis costæ duabus, lineaque postica sinuata saturate griseis, striga obliqua sub plica posita signoque disci arcuato nigris; post. dilute griseis; capite ochreo-albo.

Christchurch to Invercargill, New Zealand, in December and January.

452. *Oec. hemimochla*, Meyr.

(*Oecophora hemimochla*, Meyr., Trans. N. Z. Inst., 1883, 38.)

Minor, alis ant. albidis, griseo-conspersis, striga sub plica posita obliqua, punctis disci duobus, striga anguli analis obliqua, maculaque subapicali nigricantibus; post. albido-griseis; capite ochreo-albo.

Hamilton to Wellington, New Zealand, in January and March.

453. *Oec. griseata*, Butl.

(*Oecophora griseata*, Butl., Proc. Zool. Soc., Lond., 1877, 405; Meyr., Trans. N. Z. Inst., 1883, 39.)



Media, alis ant. dilatatis, albido-ochreis griseisve, punctis disci duobus, signo sub plica posito obliquo, macula costæ media nebulosa alteraque anguli analis saturate fuscis; post. griseo-albidis griseisve.

Christchurch to Invercargill, New Zealand, from December to March.

454. *Oec. phegophylla*, Meyr.

(*Oecophora phegophylla*, Meyr., Trans. N. Z. Inst., 1883, 39.)

Media, alis ant. dilatatis, ochreo-rufis, puncto disci strigaeque dorsi indentata ochreo-albidis, partim flavo-suffusis; post. saturate griseis.

Lake Wakatipu, New Zealand, in December.

455. *Oec. oporæa*, Meyr.

(*Oecophora oporæa*, Meyr., Trans. N. Z. Inst., 1883, 40.)

Media, alis ant. saturate flavis, linea costæ basali nigrescenti, interdum punctis disci tribus rufis; post. griseis; thorace flavo.

Castle Hill, New Zealand, in January.

456. *Oec. horæa*, Meyr.

(*Oecophora horæa*, Meyr., Trans. N. Z. Inst., 1883, 40.)

Minor, alis ant. albido-ochreis, flavido-suffusis, striga costæ basali nigrescenti, signo plicæ, altero anguli analis, punctisque costæ duobus obscuris saturate fuscis; post. griseis; thorace antice saturate fusco, postice flavido.

Hamilton to Bealey River, New Zealand, in January.

457. *Oec. armigerella*, Walk.

(*Oecophora armigerella*, Walk. 698, Meyr. Trans. N. Z. Inst., 1883, 41.)

Minor, alis ant. flavis, striga costæ basali nigrescenti, interdum punctis disci duobus lineaque anguli analis obliqua saturate fuscis; post. griseis; thorace flavo, humeris anguste nigrescentibus.

Dunedin to Invercargill, New Zealand, from December to February.



458. *Oec. apanthès*, Meyr.

(*Oecophora apanthès*, Meyr., Trans. N. Z. Inst., 1883, 41.)

Minor, alis ant. dilute albido-ochreis, vix flavido-suffusis, striga costæ basali nigrescenti, macula apicis parva, interdum punctis disci tribus lineaque anguli analis obliqua saturate fuscis; post. albido-griseis; thorace dilute albido-ochreo, macula humeri interiori saturate fusco.

Hamilton, New Zealand, in January.

459. *Oec. ancæma*, Meyr.

(*Oecophora ancæma*, Meyr., Trans. N. Z. Inst., 1883, 42.)

Minor, alis ant. albido-ochreis, levissime griseo-irroratis, striga costæ basali, strigula anguli analis obliqua, interdum etiam signo plicæ saturate fuscis; post. griseis; thorace saturate fusco, macula lateris parva pallida.

Lake Wakatipu, New Zealand, in December.

460. *Oec. macarella*, Meyr.

(*Oecophora macarella*, Meyr., Trans. N. Z. Inst., 1883, 43.)

Minor, alis ant. dilute flavis, costæ basi nigrescenti, interdum signo plicæ lineaque anguli analis obliqua obscuris saturate fuscis; post. albido-griseis; thorace saturate fusco, margine postico anguste flavido.

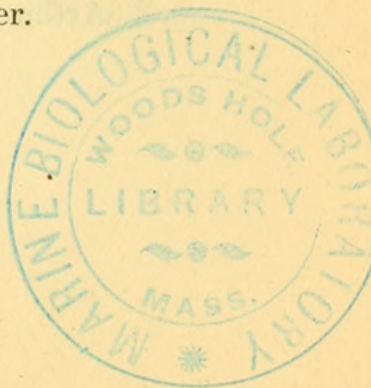
Christchurch, New Zealand, in January.

461. *Oec. maranta*, n. sp.

Parva, alis ant. angustis, dilute albido-ochreis; post. griseo-albidis.

♂. 12 mm. Head, palpi, antennæ, thorax, abdomen, and legs whitish-ochreous. Forewings elongate, narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; pale whitish-ochreous; extreme base of costa dark fuscous: cilia pale whitish-ochreous. Hindwings grey-whitish; cilia very pale whitish-ochreous.

Invercargill, New Zealand; one specimen in December.





462. *Oec. homodoxa*, Meyr.

(*Oecophora homodoxa*, Meyr. Trans. N. Z. Inst., 1883, 43.)

Minor, alis ant. albido-griseis, saturatiori irroratis, signo plicae ante medium alteroque anguli analis vix saturatioribus; post. griseis.

Lake Wakatipu, New Zealand, in December.

463 *Oec. siderodeta*, Meyr.

(*Oecophora siderodeta*, Meyr., Trans. N. Z. Inst., 1883, 43.)

Minor, alis ant. angustis, ochreis, saturate fusco-suffusis, interdum fasciis tribus obliquis obscuris, dorso sæpius basim versus pallidiori; post. saturate griseis.

Christchurch to Lake Wakatipu, New Zealand, from December to February.

464. *Oec. hoplodesma*, Meyr.

(*Oecophora hoplodesma*, Meyr., Trans. N. Z. Inst., 1883, 44.)

Minor, alis ant. angustis, dilute flavis, costæ dimidio antico, fasciis tribus obliquis quartaque marginis postici griseis; post. griseis.

South Rakaia, New Zealand, in March.

465. *Oec. chrysogramma*, Meyr.

(*Oecophora chrysogramma*, Meyr., Trans. N. Z. Inst., 1883, 44.)

Minor, alis ant. angustis, saturate flavis, basi, fasciis duabus obliquis, macula costæ postica transversa, strigaeque marginis postici saturate purpureo-fuscis; post. saturate fuscis.

Wellington, New Zealand, in December.

## 65.\* CREMNOGENES, Meyr.

466. *Cremn. aphrontis*, Meyr.

(*Cremnogenes aphrontis*, Meyr., Trans. N. Z. Inst., 1883, 46.)

Minor, alis ant. ochreo-flavis, partim griseo-suffusis, puncto disci nigro; post. saturate griseis, basim versus dilutioribus; antennis ♂ brevius ciliatis.

Arthur's Pass, New Zealand, in January.



467. *Cremn. epichalca*, n. sp.

Minor, alis ant. æreo-ochreis, rarius punctis disci duobus lineaque postica transversa obscuris griseis; post. griseis; antennis ♂ longius ciliatis.

♂ 12-15 mm. Head, palpi, and thorax shining bronzy-ochreous. Antennæ dark bronzy-fuscous, ciliations  $2\frac{1}{2}$ , whorled. Abdomen dark bronzy-grey. Legs bronzy-ochreous, anterior pair suffused with grey. Forewings elongate, costa moderately arched, apex round-pointed, hindmargin very obliquely rounded; shining bronzy-ochreous, usually without markings; rarely a dot on fold, a second in disc beyond middle, and a posterior transverse angulated line obscurely grey: cilia pale bronzy-ochreous. Hindwings grey, with purplish reflections; cilia pale greyish-ochreous.

Might readily be mistaken for a form of *C. aphrontis*, but for the entirely different antennal ciliations of the ♂, which are as in the following species.

Arthur's Pass (5,000 feet), New Zealand; several specimens in January.

468. *Cremn. oxyina*, Meyr.

(*Cremnogenes oxyina*, Meyr., Trans. N. Z. Inst., 1883, 45.)

Minor, alis ant. ♂ saturate fuscis, ferrugineo-mixtis, ♀ rufo-ochreis, fusco-mixtis, interdum striga dorsi indentata pallida; signo sub plica posito punctoque disci nigricantibus; post. saturate fuscis.

Lake Wakatipu, New Zealand, in December.

## 66. CROSSOPHORA, Meyr.

Head smooth, sidetufts moderate, loosely spreading. Antennæ in ♂ serrate, with long fine cilia (3-4), basal joint with strong pecten. Palpi moderate, second joint not reaching base of antennæ, with appressed scales, somewhat loose beneath, terminal joint shorter than second, moderate, curved. Thorax smooth. Forewings elongate, hindmargin very oblique. Hindwings somewhat narrower than forewings, elongate-ovate or ovate-lanceolate, cilia  $1-1\frac{1}{4}$ . Abdomen moderate. Posterior tibiæ clothed with long



hairs. Forewings with vein 7 to costa, 2 from about angle of cell. Hindwings normal, veins 3 and 4 sometimes stalked, rarely coincident.

Differs essentially from *Oecophora*, of which it is a development, only by the long antennal ciliations of ♂.

1a. Hindwings yellowish or ochreous.

2a. Forewings with a white bar. ....474. *semiota*.

2b. „ without white markings .....473. *cenopa*.

1b. Hindwings grey or whitish.

2a. Head pale ochreous .....469. *phthorodoxa*.

2b. „ white.

3a. Discal dots blackish .....472. *thetias*.

3b. „ „ ochreous.

4a. Thorax with anterior margin dark fuscous...470. *niphadia*.

4b. „ wholly white .....471. *asyneta*.

469. *Cross. phthorodoxa*, n. sp.

Media, alis ant. griseis, saturatori alboque conspersis, punctis disci tribus serieque postica angulata saturatoribus, strigula anguli analis alba maculam posticam saturatiorem excipiente; post. dilutius griseis; capite luteolo.

♂ ♀, 16-20 mm. Head pale ochreous. Palpi dark fuscous mixed with white. Antennæ whitish-ochreous or fuscous. Thorax white, with an anterior dark fuscous band. Abdomen grey. Legs dark fuscous mixed with ochreous-whitish. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; grey, coarsely irrorated with dark grey and whitish; five or six obscure darker spots on costa; an obscure darker dot in disc before middle, a second obliquely before it on fold, and a third more blackish in disc beyond middle, surrounded with whitish and connected with anal angle by a whitish line, followed by a suffused darker spot; an angulated transverse series of cloudy blackish spots very near hindmargin and apical part of costa: cilia grey mixed with whitish, with a series of cloudy darker spots. Hindwings grey, paler towards base; cilia grey, base ochreous-whitish.



The only species of the genus possessing an ochreous head.

Sydney and Blackheath (3,000 feet), New South Wales, in October and November ; two specimens.

470. *Cross. niphadia*, n. sp.

Minor, alis ant. niveis, plus minusve ochreo-suffusis, puncto subcostali ad basim nigricante, punctis disci tribus serieque submarginali fuscis ; post. albido-griseis ; capite niveo.

♂ ♀. 13-18 mm. Head and antennæ white. Palpi white, second joint externally dark fuscous towards apex. Thorax white, anterior margin narrowly suffused with dark fuscous. Abdomen and legs whitish, anterior legs dark grey. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded ; white, somewhat suffused with pale brownish-ochreous towards margins and apex ; a blackish dot near base beneath costa ; a brownish-ochreous or fuscous dot in disc before middle, a second obliquely before it on fold, and a third in disc at  $\frac{2}{3}$  ; a row of obscure fuscous dots immediately before hindmargin and apical part of costa : cilia very pale whitish-ochreous. Hindwings whitish-grey, base paler ; cilia ochreous-whitish.

Brisbane and Toowoomba (2,000 feet), Queensland ; Sydney, New South Wales ; five specimens in September and October.

471. *Cross. asyneta*, n. sp.

Minor, alis ant. niveis, maculis duabus disci in fasciis obliquis perobscuris impositis, tertia ad dorsum media, nebula costæ antepicali lineaque submarginali ochreis ; post. griseo-albidis.

♂ ♀. 13-15 mm. Head, palpi, antennæ, and thorax white ; second joint of palpi with a broad suffused dark fuscous band. Abdomen grey-whitish. Legs whitish, anterior pair suffused with dark fuscous. Forewings elongate, rather narrow, costa moderately arched, apex tolerably acute, hindmargin extremely obliquely rounded : white, with cloudy yellow-ochreous markings ; a small round spot in disc before middle, and a second at  $\frac{2}{3}$  ; these spots tend to be connected with costa and about anal angle by cloudy



streaks, forming narrow oblique fasciæ : a small indistinct spot towards middle of inner margin ; an indistinct subtriangular costal suffusion towards apex ; a row of small very indistinct somewhat confluent spots before hindmargin : cilia ochreous-whitish. Hindwings grey-whitish ; cilia ochreous-whitish.

Sydney, New South Wales, in October ; three specimens.

472. *Cross. thetias*, n. sp.

Minor, alis ant. albidis, punctis disci tribus serieque submarginali nigricantibus ; post. exalbidis.

♂. 13 mm. Head, palpi, antennæ, thorax, abdomen, and legs whitish ; second joint of palpi externally grey ; anterior margin of thorax narrowly grey ; anterior and middle legs suffused with grey. Forewings elongate, narrow, costa slightly arched, apex round-pointed, hindmargin extremely obliquely rounded ; white, slightly greyish-tinged ; a blackish dot in disc before middle, a second on fold slightly beyond first, and a third in disc at  $\frac{3}{4}$  ; a row of blackish dots before hindmargin and apical part of costa, terminating in two larger dots on anal angle : cilia whitish. Hindwings grey-whitish ; cilia whitish.

Sydney, New South Wales ; one specimen in November.

473. *Cross. ænopa*, n. sp.

Minor, alis ant. saturatius purpureo-griseis ; post. luteolis, apice vix griseo.

♂ ♀. 16-17 mm. Head mixed with pale yellowish and grey. Palpi grey, edges whitish-yellowish. Antennæ dark grey. Thorax purplish-grey, sometimes with some whitish-yellowish scales towards centre. Abdomen whitish-yellowish. Legs dark fuscous, posterior pair whitish-yellowish. Forewings elongate, narrow, costa posteriorly gently arched, apex tolerably acute, hindmargin slightly sinuate, extremely oblique ; rather dark purplish-grey : cilia purplish-grey, towards anal angle yellowish-tinged. Hindwings pale greyish-yellowish, towards apex somewhat greyer ; cilia whitish-yellowish.

Quorn, South Australia, in October ; three specimens.



474. *Cross. semiota*, n. sp.

Parva, alis ant. saturate purpureo-fuscis, nitidis, fascia antica angusta costam non attingente alba ; post. subfulvis.

♂. 11 mm. Head, palpi, antennæ, thorax, and abdomen dark bronzy-grey. Legs dark grey, apex of joints and hairs of posterior tibiæ ochreous-whitish. Forewings elongate, narrow, costa gently arched, apex tolerably acute, hindmargin hardly sinuate, extremely oblique ; dark shining purplish-fuscous ; a rather cloudy straight somewhat oblique ochreous-white bar from inner margin before middle, reaching more than half across wing, apex suffused : cilia purplish-grey. Hindwings and cilia shining smoky-ochreous ; veins 3 and 4 coincident.

It is not improbable that the coincidence of veins 3 and 4 of the hindwings may prove to be an individual characteristic, and not constant in the species ; at any rate it does not at present seem necessary to separate the species generically from *C. ænopa*, to which it is in other respects apparently nearly allied.

Sydney, New South Wales ; one specimen in October.

## 67. OCHLOGENES, Meyr.

Head with appressed scales, sidetufts small, appressed. Antennæ in ♂ moderately and evenly ciliated (1), basal joint moderate, without pecten. Palpi rather short, second joint not nearly reaching base of antennæ, somewhat dilated with appressed scales, slightly loose beneath, terminal joint shorter than second, moderate, curved. Thorax smooth. Forewings elongate, hindmargin very oblique. Hindwings  $\frac{2}{3}$ , ovate-lanceolate, cilia  $1\frac{1}{2}$ . Abdomen moderate. Middle tibiæ with median whorl of projecting scales ; posterior tibiæ clothed with long hairs above. Forewings with vein 7 to costa, 2 nearly from angle of cell. Hindwings normal.

Also a development of *Oecophora*.

475. *Ochl. advectella*, Walk.

(*Gelechia advectella*, Walk. 647.)



Parva, alis ant. albis, fusco-conspersis, punctis nebulosis plerisque, tribus etiam disci insignioribus nigris; post. griseis, basim versus dilutioribus.

♂ ♀. 9-12 mm. Head and thorax ochreous-whitish, irrorated with blackish. Palpi ochreous-white, basal half of second joint and base of apical joint black. Antennæ whitish, suffusedly annulated with dark grey. Abdomen ochreous-grey-whitish. Legs dark fuscous ringed with whitish, posterior pair whitish. Forewings elongate, narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded; white, finely irrorated with fuscous; markings formed by a coarse black irroration, consisting of numerous small cloudy irregularly scattered spots, and three rather larger and more conspicuous in disc, first before middle, second on fold obliquely before first, third at  $\frac{2}{3}$ : cilia whitish, with a sharp black median line, base irrorated with black. Hindwings grey, becoming much paler towards base; cilia grey-whitish.

Duaringa, Queensland; Newcastle and Sydney, New South Wales; Launceston, Tasmania; in September, January, and July, not uncommon on trunks of *Eucalyptus*.

#### 68. DISSELIA, Meyr.

Head smooth, sidetufts rather large, appressed. Antennæ in ♂ serrate, moderately strongly ciliated ( $1\frac{1}{2}$ ), basal joint rather elongate, with strong pecten. Palpi rather short, second joint not reaching base of antennæ, with smooth appressed scales, terminal joint shorter than second, moderate, curved. Thorax smooth. Forewings elongate, hindmargin very oblique. Hindwings slightly narrower than forewings, almost ovate-lanceolate, cilia 1; in ♂ with an expanded spherical tuft of very long fine radiating hairs at base above. Abdomen somewhat flattened. Posterior tibiæ clothed with long fine hairs above. Forewings with vein 7 to costa, 2 from angle of cell. Hindwings normal.

Nearly allied to *Oecophora* and *Crossophora*, probably developed from the former; differing from all others by the spherical tuft of hairs on the hindwings of ♂.



476. *Diss. aleurota*, n. sp.

Media, alis ant. canis, griseo plus minusve suffusis, punctis disci tribus serieque submarginali saturate griseis, interdum obsoletis ; post. ♂ luteolis, apice griseo, ♀ griseis.

♂ ♀. 18-22 mm. Head white. Palpi white, second joint externally grey. Antennæ grey. Thorax white, sometimes pale greyish anteriorly. Abdomen in ♂ whitish-yellowish, in ♀ grey-whitish. Legs dark grey, ringed with whitish, posterior pair whitish-yellowish. Forewings elongate, narrow, costa moderately arched, apex round-pointed, hindmargin extremely obliquely rounded ; white, more or less suffusedly irrorated with grey ; a dark grey dot in disc at  $\frac{1}{3}$ , a second on fold rather before first, and a third in disc at  $\frac{2}{3}$ , sometimes all obsolete ; a submarginal row of dark grey dots along hindmargin and apical part of costa, often obsolete : cilia whitish-grey or whitish-yellowish. Hindwings in ♂ pale ochreous-yellowish, apex suffused with grey, in ♀ wholly grey ; cilia in ♂ whitish-yellowish, in ♀ grey-whitish, round apex suffused with grey.

Wollongong and Mount Kosciusko (4,000 feet), New South Wales ; Launceston, Deloraine, Campbelltown, and George's Bay, Tasmania ; rather common from October to January.

## 69. MACROBATHRA, Meyr.

Head smooth, sidetufts small, closely appressed. Antennæ in ♂ slender, moderately and evenly ciliated (1), basal joint very elongate, very slender, without pecten or with one or two scales at base. Palpi long or very long, second joint somewhat exceeding base of antennæ, with appressed scales, smooth or somewhat loose beneath, terminal joint longer than second, slender, strongly recurved. Thorax smooth. Forewings elongate-lanceolate. Hindwings about  $\frac{3}{4}$  of forewings, broadly lanceolate, cilia  $1\frac{1}{2}$ -2. Abdomen short, dilated and somewhat flattened. Posterior tibiæ clothed with long fine hairs above. Forewings with vein 7 running to costa, 2 from before angle, lower fork of 1



obsolete towards base of wing. Hindwings with veins 3 and 4 stalked, rarely from a point, posterior margin of cell angulated outwards on origin of 5.

A very distinct and easily recognisable genus of considerable extent, and destined to be largely increased. Although related to *Oecophora*, it has no immediate connection with that or any other known genus. The very long simple basal joint of antennæ, the terminal joint of palpi exceeding the second in length, the obsolescence of the lower fork of vein 1 of the forewings, and the angulated posterior margin of cell and usually stalked veins 3 and 4 of the hindwings are peculiarly characteristic points. The species are all elegantly marked with pale spots or fasciæ on a dark ground, and often fly in the sunshine, though some appear to be of very retired habit. Many of the larvæ are known; all feed on *Leguminosæ*, and all except one exclusively on species of *Acacia*, usually between spun leaves or phyllodia. No species are known outside Australia.

- 1a. Forewings with silvery-metallic markings .....500. *constrictella*.
- 1b. Forewings without metallic markings.
- 2a. With two entire anterior fasciæ .....499. *melanargyra*.
- 2b. Without two entire fasciæ.
- 3a. Thorax with posterior half white or yellowish.
- 4a. Markings of forewings distinctly yellow.
- 5a. With a single yellow band.
- 6a. Band nearly parallel-sided .....478. *monostadia*.
- 6b. „ much broadest on costa.....479. *euryxantha*.
- 5b. With additional markings.
- 6a. Basal area coppery-fuscous ....480. *chrysotoxa*.
- 6b. „ „ pale yellowish .....481. *mesopora*.
- 4b. Markings white or whitish.
- 5a. Basal area whitish.....482. *anemarcha*.
- 5b. „ „ dark fuscous.
- 6a. Median costal spot longitudinally elongate.....484. *desmotoma*



- 6b. Median costal spot not elongate
- 7a. Antennæ wholly white .....491. *argonota*.
- 7b. „ annulated with dark fuscous.
- 8a. Abdomen grey.
- 9a. With a white streak along part of inner  
margin ... .....497. *crymalea*.
- 9b. Without dorsal streak.
- 10a. Dorsal triangular spot touching fascia  
and anal angle .....490. *niphadobola*.
- 10b. Dorsal triangular spot small, separate...486. *trithyra*.
- 8b. Abdomen yellowish or ochreous.
- 9a. Cilia of forewings with a white spot  
below apex .....487. *euryleuca*.
- 9b. Cilia of forewings without subapical spot.
- 10a. Cilia of hindwings more or less whitish-  
ochreous .....485. *melanomitra*.
- 10b. Cilia of hindwings wholly grey ... .....489. *chlorosoma*.
- 3b. Thorax almost wholly dark fuscous.
- 4a. Antennæ with apical half white .....492. *alternatella*.
- 4b. „ „ „ not white.
- 5a. Markings of forewings yellow.
- 6a. Anterior fascia entire ... . .....477. *hamaxitodes*.
- 6b. „ „ not reaching inner  
margin... .....507. *chrysospila*.
- 5b. Markings of forewings not yellow.
- 6a. Crown of head white.....488. *melanota*.
- 6b. „ „ wholly whitish-ochreous..505. *brontodes*.
- 6c. „ „ yellow-ochreous.
- 7a. Forewings without pale fascia .....503. *porphyrea*.
- 7b. „ with white anterior fascia.
- 8a. Abdomen pale yellowish-ochreous .....493. *xuthocoma*.
- 8b. „ grey.
- 9a. Forewings with posterior spots rosy.....495. *rhodospila*.
- 9b. „ „ „ „ not rosy..494. *leucopeda*.
- 6d. Crown of head fuscous or dark fuscous.



- 7a. Forewings with defined whitish post-  
median dorsal spot.....506. *myriophthalma*.  
7b. Forewings without defined whitish post-  
median dorsal spot.  
8a. Median costal spot longitudinally elon-  
gate .....483. *heminephela*.  
8b. Median costal spot not elongate.  
9a. With pale anterior fascia.  
10a. Abdomen ochreous-yellowish .....501. *ceraunobola*.  
10b.     ,,     dark grey.  
11a. Forewings with a defined grey streak  
along inner margin .....498. *hemitropa*.  
11b. Forewings without grey dorsal streak...496. *synastra*.  
9b. Without pale fascia.  
10a. Posterior costal spot dot-like, sharply  
defined .....504. *nephelomorpha*.  
10b. Posterior costal spot small, cloudy....502. *anemodes*.

477. *Macr. hamaxitodes*, n. sp.

Minor, alis ant. luteis, macula basali saturate fusca, fascia postica latiore sub medio interrupta maculaque subapicali cum hac conjuncta purpureo-fuscis ; post. griseis.

♂ ♀. 12-14 mm. Head and palpi whitish-ochreous, palpi with base and apex dark fuscous. Antennæ dark fuscous, ringed with whitish-ochreous. Thorax dark fuscous. Abdomen pale greyish-ochreous. Legs dark fuscous, ringed with whitish-ochreous, posterior pair whitish-ochreous. Forewings elongate-lanceolate ; pale ochreous-yellowish ; a small dark fuscous basal patch, its outer edge straight, not oblique ; a rather broad straight purplish-fuscous fascia from  $\frac{3}{5}$  of costa to anal angle, narrower beneath, interrupted below middle ; a narrow fuscous patch extending along upper half of hindmargin, confluent beneath with fascia above interruption ; cilia pale ochreous-yellowish, with a fuscous spot below apex. Hindwings grey ; cilia whitish-grey, yellowish-tinged.

Sydney, New South Wales, in October, November and March ; five specimens.



478. *Macr. monostadia*, n. sp.

Minor, alis ant. cupreo-fuscis, fascia antica lata recta dilute flava albo-marginata ; post. saturate fuscis.

♂ ♀. 13-15 mm. Head fuscous on crown, face pale whitish-ochreous, terminal joint anteriorly dark fuscous. Antennæ dark fuscous, sharply annulated with ochreous-whitish. Thorax pale whitish yellowish, anterior margin and a small posterior spot dark fuscous. Abdomen pale yellowish-ochreous. Legs dark fuscous, ringed with yellow-whitish, posterior pair yellow-whitish. Forewings elongate-lanceolate ; coppery-fuscous ; a broad pale ochreous-yellow laterally whitish-margined anterior transverse band, extending on costa from  $\frac{1}{6}$  to middle, sides nearly parallel, hardly oblique : cilia fuscous. Hindwings dark fuscous ; cilia pale whitish ochreous.

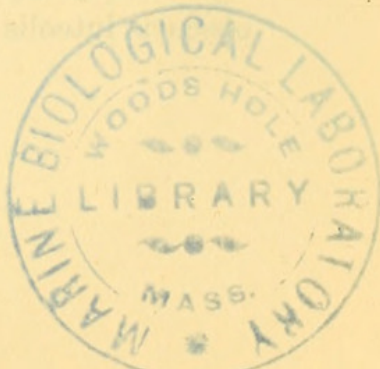
Duaringa and Toowoomba (2,000 feet) Queensland, in December ; two specimens.

479. *Macr. euryxantha*. n. sp.

Minor, alis ant. saturate purpureo-fuscis, fascia latissima mediana inferius angustata flava, antice cano-marginata ; post. saturatius fuscis.

♀. 15 mm. Head pale yellowish, crown more ochreous-yellow, behind fuscous. Palpi whitish-yellowish, terminal joint anteriorly dark fuscous. Antennæ dark fuscous, sharply annulated with whitish. Thorax pale yellowish, sides ochreous-yellow, anterior margin dark purplish-fuscous. Abdomen ochreous-yellow, posteriorly suffused with fuscous. Legs dark fuscous, posterior pair ochreous-yellowish. Forewings elongate-lanceolate ; dark purple-fuscous ; a very broad ochreous-yellow anteriorly white-margined band, extending on costa from  $\frac{1}{6}$  to  $\frac{3}{4}$ , on inner margin from  $\frac{1}{3}$  to  $\frac{3}{4}$ , nearly twice as broad on costa as on inner margin, sides straight : cilia fuscous. Hindwings rather dark fuscous ; cilia light fuscous.

Duaringa, Queensland ; one specimen received from Mr. G. Barnard.





480. *Macr chrysotoxa*, n. sp.

Media, alis ant. cupreo-fuscis, triangulo costæ antico dorsum attingente flavo, linea postica transversa incurvata luteola; post. saturate fuscis.

♂ ♀. 16-19 mm. Head fuscous on crown, face whitish-yellowish. Palpi whitish-yellowish, terminal joint anteriorly dark fuscous. Antennæ dark fuscous, spotted with whitish. Thorax yellow, anterior margin dark fuscous, expanded centrally into a quadrate spot. Abdomen grey, mixed with whitish-ochreous. Legs dark fuscous, ringed with whitish-yellowish, posterior pair pale yellowish. Forewings elongate-lanceolate; coppery-fuscous; a triangular yellow patch extending on costa from near base to middle, its posterior angle narrowly produced further along costa, its apex touching inner margin about  $\frac{1}{3}$ ; sometimes a small whitish-yellowish spot in disc below middle; a whitish-ochreous rather inwards-curved transverse line from beyond  $\frac{3}{4}$  of costa to anal angle: cilia fuscous, with whitish-ochreous spots on extremities of posterior line. Hindwings dark fuscous; cilia light fuscous, on costa becoming whitish-yellowish towards tips.

Larva elongate, cylindrical; grey-whitish; subdorsal very broad, purplish-fuscous; a small fuscous spot on each segment on side; head blackish-fuscous; second segment with anterior half ochreous-yellow, posterior half blackish-fuscous. Feeds between tubularly united leaflets of *Acacia decurrens*, forming a gallery of silk and refuse. Pupa amongst refuse, affixed by tail.

Brisbane and Toowoomba (2,000 feet), Queensland; Newcastle and Sydney, New South Wales; Melbourne and Warragul, Victoria; Launceston and Hobart, Tasmania; common from September to April.

481. *Macr. mesopora*, n. sp.

Minor, alis ant. luteolis, fascia antica angusta saturate fusca, dimidio apicali cupreo-fusco maculis costæ angulique analis obscuris luteolis notato; post saturatius fuscis



♀. 14 mm. Head whitish-yellowish. Palpi whitish-yellowish, terminal joint anteriorly dark fuscous. Antennæ dark fuscous, spotted with whitish. Thorax whitish-yellowish, anterior margin dark fuscous, dilated towards middle. (Abdomen broken.) Legs whitish-yellowish, anterior and middle pair suffused with dark fuscous. Forewings elongate-lanceolate; whitish-yellowish; a narrow ill-defined rather dark fuscous fascia from  $\frac{1}{5}$  of costa to  $\frac{1}{3}$  of inner margin; a somewhat inwards-curved dark fuscous line from  $\frac{3}{5}$  of costa to  $\frac{3}{4}$  of inner margin, beyond which the apical area is wholly coppery-fuscous, except a cloudy spot on costa towards apex, and a small very indistinct spot on anal angle; cilia light fuscous, on costal and anal spots yellow-whitish. Hindwings rather dark fuscous; cilia whitish-fuscous.

Blackheath (3,500 feet), New South Wales; one specimen in January.

482. *Macr. anemarcha*, n. sp.

Minor, alis ant. luteo-albidis, macula dorsi antica transversa interdum obsoleta, fascia postica fere interrupta, altera marginis postici saturate fuscis; post. saturate fuscis.

♀. 16-17 mm. Head yellow-whitish. Palpi whitish, terminal joint anteriorly dark fuscous. Antennæ dark fuscous, annulated with white. Thorax yellow-whitish, anterior margin dark fuscous, centrally expanded into a quadrate spot. Abdomen grey. Legs dark fuscous, ringed with whitish, posterior tibiæ whitish. Forewings elongate-lanceolate; yellow-whitish; costa sometimes fuscous towards base; sometimes a transverse dark fuscous streak from fold to inner margin about  $\frac{1}{3}$ , dilated above, often entirely absent; a moderate ill-defined dark fuscous fascia from  $\frac{2}{3}$  of costa to  $\frac{3}{4}$  of inner margin, more or less distinctly interrupted below middle, narrowed on costa; a rather narrow irregular ill-defined dark fuscous fascia along hindmargin from apex almost to anal angle: cilia whitish-fuscous, on costa and beneath apex white, dark fuscous on fasciæ. Hindwings dark fuscous; cilia fuscous.

Launceston, Tasmania; four specimens in January, frequenting *Acacia decurrens*.



483. *Macr. heminephela*, n. sp.

Media, alis ant. saturatius æreo-griseis, maculis costæ tribus niveis; post. saturate fuscis.

♂ ♀. 17-20 mm. Head, palpi, antennæ, and thorax greyish-bronze, sides of face white. Abdomen yellow-ochreous. Legs dark fuscous, ringed with whitish. Forewings elongate-lanceolate; shining greyish-bronze, with clear white markings; a very small spot at base of costa; a small oblique spot on costa at  $\frac{1}{5}$ ; an elongate semi-oval spot extending along central third of costa; a wedge-shaped inwardly oblique streak from costa near apex, reaching half across wing; sometimes a small spot on anal angle: cilia light fuscous, on costal spot white. Hindwings dark fuscous; cilia pale fuscous, towards base and on costa light ochreous-yellowish.

Launceston and Hobart, Tasmania; common from November to January; exclusively attached to *Acacia dealbata*, on which the larva must undoubtedly feed; it appears to be never found amongst the closely allied *Acacia decurrens*, even when both trees grow in the same localities.

484. *Macr. desmotoma*, n. sp.

Minor, alis ant. saturate æreo-fuscis, fascia antica latiori obliqua, macula costæ media elongata, altera ad dorsum obscura, tertia costæ ante apicem triangulari, punctoque anguli analis canis; post saturate fuscis.

♂ ♀. 14-17 mm. Head white, crown dark fuscous. Palpi white, terminal joint with dark fuscous lateral lines. Antennæ dark fuscous, spotted with white, beneath white. Thorax whitish, anterior margin dark fuscous, centrally expanded into a quadrate spot. Abdomen yellow-ochreous. Legs dark fuscous, banded with whitish-ochreous, posterior pair yellow-ochreous. Forewings elongate-lanceolate; dark bronzy-fuscous; markings white, becoming greyish or ochreous-tinged on dorsal half; a moderately broad oblique fascia from  $\frac{1}{4}$  of costa to before middle of inner margin; a wedge-shaped spot extending along costa from before



middle to  $\frac{3}{4}$ ; a small cloudy spot on or near inner margin at  $\frac{3}{4}$ ; a small triangular spot on costa towards apex, and a dot on anal angle; cilia pale yellow-ochreous, barred with fuscous on apex and middle of hindmargin. Hindwings dark fuscous; cilia pale yellow-ochreous, becoming fuscous towards apex.

Larva slender, cylindrical, pale yellowish-green; spots small, black; dorsal greyish; subdorsal broad, dark fuscous; head and second segment brownish-ochreous. Feeds in spun-up leaflets of *Acacia decurrens*.

Brisbane and Toowoomba (2,000 feet), Queensland; Newcastle and Sydney, New South Wales; Melbourne, Victoria; from September to April, very common.

485. *Macr. melanomitra*, n. sp.

Minor, alis ant. saturate fuscis, fascia antica latiore directa, maculis triangularibus costæ duabus, tertia dorsi, puncto etiam anguli analis, niveis; post. griseis, ciliorum basi luteola.

♂ ♀. 12-17 mm. Head white, crown dark fuscous. Palpi white, terminal joint with dark fuscous lateral lines. Antennæ dark fuscous, annulated with white. Thorax white, anterior margin narrowly dark fuscous, centrally expanded into a quadrate spot, and with a small posterior dark fuscous spot. Abdomen pale greyish-ochreous. Legs dark grey, banded with white, posterior pair whitish. Forewings elongate-lanceolate; dark fuscous; base of inner margin slenderly white; a moderately broad not oblique white fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, outer edge somewhat bent; a triangular white spot on middle of costa, nearly meeting a similar spot on inner margin before anal angle; a smaller triangular white spot on costa at  $\frac{4}{5}$ , and a dot on anal angle, sometimes connected by an obscure line: cilia pale whitish-ochreous, on hind margin greyish towards tips, barred with dark fuscous at apex and above anal angle. Hindwings grey; cilia whitish-ochreous, towards tips more or less greyish.



This and the two following species are closely allied and very similar; *M. melanomitra* is best separated from *M. trithyra* by the partially whitish-ochreous cilia, but differs also in the broader fascia, and more triangular costal spots.

Bowenfels (2,500 feet), New South Wales; Mount Lofty, Wirrabara, and Quorn, South Australia; in October and January; common.

486. *Macr. trithyra*, n. sp.

Parva, alis ant. nigricantibus, fascia antica modica obliqua, maculis costæ duabus subquadratis, altera lineam emittente, tertia dorsi subtriangulari; post. saturatius æreo-fuscis, ciliis omnino griseis; abdomine griseo.

♀. 11-13 mm. Head white, crown blackish. Palpi white, terminal joint blackish. Antennæ black, spotted with white. Thorax white, anterior margin and a small posterior spot blackish. Abdomen dark grey. Legs blackish, banded with white. Forewings elongate-lanceolate; blackish; markings white, sometimes slightly ochreous-tinged; a moderate oblique fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin; a subquadrate spot on middle of costa, and a slightly larger one on inner margin hardly beyond it, subtriangular; a larger quadrate spot on costa, near apex, connected by a fine irregular line with a dot on anal angle: cilia dark grey, towards anal angle paler, on costal spot white. Hindwings rather dark bronzy-fuscous; cilia grey.

Differs from the preceding by the wholly grey cilia of hindwings and abdomen.

Sydney and Cooma (3,000 feet), New South Wales; Mount Lofty, South Australia; four specimens in December and January.

487. *Macr. euryleuca*, n. sp.

Minor, alis ant. saturate fuscis, fascia antica lata obliqua, maculis costæ ac dorsi obscuris, tertia costæ postica majore angulum analem attingente, quarta etiam ciliorum subapicali niveis; post. saturatius fuscis, ciliis stramineis.

♂ ♀. 15-18 mm. Head white, crown blackish. Palpi white, terminal joint with dark fuscous line on each side. Antennæ



blackish, spotted with whitish. Thorax white, anterior margin very narrowly dark fuscous. Abdomen ochreous-yellowish. Legs whitish, tarsi and middle tibiae obscurely banded with dark fuscous, posterior pair whitish-ochreous. Forewings elongate-lanceolate; dark fuscous, posteriorly somewhat ochreous-tinged; markings shining white; a broad oblique fascia from  $\frac{1}{4}$  of costa to before middle of inner margin, outer edge somewhat bent; a small ill-defined spot on middle of costa; an indistinct cloudy larger spot on inner margin before anal angle; a considerably larger irregular spot on costa towards apex, suffusedly connected with anal angle: cilia fuscous, towards anal angle whitish-yellowish, on costal spot white, and with a clear white spot beneath apex. Hindwings rather dark fuscous; cilia whitish-yellowish, becoming fuscous-tinged round apex.

Differs from the two preceding by the broader fascia, the different character of the posterior spots, and especially by the subapical white spot in cilia.

Sydney and Shoalhaven, New South Wales, in December, January, and March; four specimens.

488. *Macr. melanota*, n. sp.

Minor, alis ant. nigrescentibus, fascia antica modica obliqua, maculis costae duabus rotundatis, tertia dorsi triangulari punctoque anali niveis; post. saturatius griseis; thorace nigricante.

♀. 17 mm. Head white, sides of crown fuscous. Palpi whitish-ochreous, terminal joint with blackish line on each side. Antennae black, spotted with whitish. Thorax purple-blackish. Abdomen yellow-ochreous. Legs whitish-ochreous, banded with blackish, tibiae more white. Forewings elongate-lanceolate; blackish-fuscous; markings clear white, margins partially narrowly ochreous; a moderate oblique fascia from  $\frac{1}{5}$  of costa to  $\frac{1}{3}$  of inner margin; a small rounded spot on middle of costa; a rather larger flattened triangular spot on inner margin before anal angle, closely followed by an anal dot; a moderate suboval inwardly



oblique spot on costa at  $\frac{3}{4}$ ; cilia dark fuscous, on costal spot white, beneath anal angle ochreous-whitish. Hindwings rather dark grey; cilia fuscous.

Very like the following, but with the thorax wholly blackish.

Toowoomba (2,000 feet), Queensland; one specimen in December, taken amongst *Acacia decurrens*.

489. *Macr. chlorosoma*, n. sp.

Minor, alis ant. nigrescentibus, fascia antica modica obliqua, maculis costæ duabus rotundatis, tertia dorsi triangulari punctoque anali canis; post. saturate fuscis; thoracis dimidio postico cano; abdomine luteo.

♀. 16 mm. Head ochreous-white, back of crown blackish. Palpi ochreous-white, terminal joint with blackish line on each side. Antennæ black, spotted with white. Thorax white, anterior margin blackish, dilated towards middle. Abdomen pale yellow-ochreous. Legs dark fuscous, banded with white. Forewings elongate-lanceolate; blackish; markings white, slightly ochreous-tinged; a moderate oblique fascia from  $\frac{1}{5}$  of costa to  $\frac{1}{3}$  of inner margin; a small rounded spot on middle of costa; a rather larger acute-triangular spot on inner margin before anal angle, closely followed by an anal dot; a moderate semi-oval rather inwardly oblique spot on costa at  $\frac{4}{5}$ ; cilia dark fuscous, on costal spot white, beneath anal angle whitish-ochreous. Hindwings dark fuscous; cilia fuscous.

Duaringa, Queensland; one specimen received from Mr. G. Barnard.

490. *Macr. niphadobola*, n. sp.

Parva, alis ant. nigrescentibus, fascia antica modica obliqua, maculis costæ duabus subtriangularibus, tertia dorsi fasciam anticam punctumque anguli analis attingente ochreo-albis; post. saturate æreo-fuscis.

♀. 12 mm. Head white, back of crown blackish. Palpi white, terminal joint black except anterior edge. Antennæ black, spotted with white. Thorax white, anterior margin and a posterior spot blackish. Abdomen grey. Legs dark fuscous, suffusedly banded



with whitish. Forewings elongate-lanceolate ; blackish ; markings ochreous-white ; a moderate oblique fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin ; a small subtriangular spot on middle of costa ; a flattened-triangular spot extending on inner margin from fascia to anal angle, followed immediately by an ill-defined dot ; a small subtriangular spot on costa near apex : cilia dark fuscous, on costal spot and beneath anal angle ochreous-white. Hindwings dark bronzy-fuscous ; cilia fuscous.

Differs from both the preceding by the grey abdomen ; characterised by the triangular dorsal spot touching both fascia and anal dot.

Rosewood, Queensland ; one specimen in September.

491. *Macr. argonota*, n. sp.

Minor, alis ant. nigris, fascia antica angustiori obliqua, macula costæ media parva, altera ante-apicali majori transversa obliqua, tertia dorsi triangulari ; post. griseis ; antennis albis.

♀. 15 mm. Head white on face, crown black. Palpi white, terminal joint black except anterior edge. Antennæ white, basal joint black. Thorax white, anterior margin black, dilated towards middle. Abdomen grey, with a pale ochreous basal band. Legs black, banded with white. Forewings elongate-lanceolate ; black ; markings snow-white ; a rather narrow oblique fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin ; a small subquadrate spot on middle of costa ; a somewhat larger acute-triangular spot on inner margin before anal angle ; a larger transverse-oblong inwardly oblique spot on costa at  $\frac{4}{5}$  : cilia dark fuscous, on costal spot white, beneath anal angle ochreous-white. Hindwings and cilia grey.

Specially characterised by the white unspotted antennæ.

Larva moderate, cylindrical, slightly tapering towards extremities, head small ; ochreous-pink, segmental divisions deeper pink, with a slender pale yellowish transverse line on anterior margin of segments, and minute scattered pale yellowish dots ; head and second segment black, anterior half of second



segment fuscous. Feeds among irregularly spun-together phyllodia and flowers of *Acacia myrtifolia*, in September. Pupa in a fine cocoon between phyllodia.

Sydney, New South Wales ; one specimen bred in October.

492. *Macr. alternatella*, Walk.

(*Gelechia alternatella*, Walk. 644.)

Minor, alis ant. saturate purpureo-fuscis, fascia antica angusta obliqua postice ochrea, puncto costæ medio, altero anguli analis, macula costæ postica obliqua albis ; post. saturate æreo-fuscis, ♂ macula magna antica lutea ; antennarum dimidio præter apicem niveo.

♂ ♀. 13-16 mm. Head and thorax dark fuscous, face ochreous-whitish. Palpi whitish-ochreous, terminal joint with blackish line on each side. Antennæ blackish, apical half white except tip. Abdomen yellow-ochreous, posteriorly mixed with dark grey. Legs dark fuscous, banded with white. Forewings elongate-lanceolate ; very dark purplish-fuscous ; markings white, slightly ochreous-tinged ; a narrow oblique fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, becoming yellow-ochreous towards posterior edge ; a dot on middle of costa ; a slightly larger dot on anal angle ; a narrow inwardly oblique spot from costa about  $\frac{3}{4}$ , reaching half across wing : cilia dark fuscous, on costal spot white. Hindwings dark bronzy-fuscous, in ♂ with a large pale ochreous-yellow oval patch extending from near base to beyond middle and reaching nearly to margins ; cilia fuscous.

In addition to the partially yellow hindwings of ♂, the minuteness of the median costal dot is a notable characteristic.

Larva slender, cylindrical, slightly tapering posteriorly, very active ; dull whitish ; subdorsal broad, deep fuscous ; spiracular ochreous-brown, composed of three partially interrupted lines ; head and second segment brownish-ochreous. Feeds between joined leaves and shoots of *Platylobium formosum*, *Bossiaea*, and probably other *Leguminosæ*, in May and August.



Brisbane, Queensland; Sydney and Orange (3,000 feet), New South Wales; Mount Lofty, South Australia; common from August to November, and February to April.

493. *Macr. xuthocoma*, n. sp.

Minor, alis ant. nigrescentibus, fascia antica angusta obliqua dorsum non attingente, maculis costæ duabus subquadratis punctoque anguli analis ochreo-albis, fasciis tribus (tertia costam non attingente) maculaque postica his interpositis obscurissimis purpureo-plumbeis; post. saturatius fuscis; capite ochreo.

♀. 15 mm. Head whitish-ochreous, crown laterally suffused with ochreous-yellowish. Palpi ochreous-yellowish, terminal joint blackish. Antennæ dark fuscous. Thorax purple-blackish. Abdomen pale yellowish-ochreous. Legs blackish, banded with white. Forewings elongate-lanceolate; blackish; a narrow oblique ochreous-white fascia from costa at  $\frac{1}{5}$ , not reaching inner margin; two rather small subquadrate ochreous-white spots on costa, rounded beneath, first in middle, second at  $\frac{4}{5}$ ; an ochreous-white dot on anal angle; an oblique fascia very near base, a direct fascia before middle, a streak from inner margin before anal angle reaching half across wing, and a small spot above anal dot very obscure purplish-leadен: cilia dark fuscous, on costal spot white. Hindwings rather dark fuscous; cilia fuscous.

Sydney, New South Wales; one specimen in March.

494. *Macr. leucopeda*, n. sp.

Parva, alis ant. nigrescentibus, fascia ad basim obscura plumbea, altera antica angusta obliqua nivea subtus grisescente, maculis costæ duabus, tertia etiam anguli analis niveis, macula dorsi postica transversa argenteo-grisea; post. griseis; capite ochreo.

♂ ♀. 10-13. mm. Head yellow-ochreous, face ochreous-whitish. Palpi whitish-ochreous, terminal joint with a blackish line on each side. Antennæ dark fuscous, obscurely spotted with whitish. Thorax dark fuscous. Abdomen grey. Legs dark fuscous, banded with white. Forewings elongate-lanceolate; blackish-fuscous; a very obscure oblique purplish-leadен fascia very near base; a



narrow oblique silvery-white fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, becoming purplish-leadene at lower extremity; a small subquadrate silvery-white spot on middle of costa; a pale silvery-grey metallic rather outwardly oblique spot from inner margin at  $\frac{3}{4}$ , reaching half across wing; a triangular silvery-white spot on costa at  $\frac{4}{5}$ , and a similar spot on anal angle, sometimes meeting: cilia dark fuscous, on costal spot white. Hindwings and cilia grey.

Larva rather elongate, somewhat tapering posteriorly; head amber; second segment black, anterior margin white; third to twelfth segments chocolate, anterior margin of each broadly clear white, posterior margin narrowly ochreous; anal shield black. Feeds on *Acacia discolor*, uniting the leaflets into a tube along midrib of leaf, in February. Pupa free, in a chamber within the tube. I have frequently met with this larva, but never on any other species of *Acacia*.

Sydney, New South Wales, in September, January, and March; rather common.

495. *Macr. rhodospila*, n. sp.

Parva, alis ant. nigriscentibus, fascia ad basim obscura plumbea, altera antica angusta obliqua nivea subtus grisescente, macula costæ media nivea altera postica tertiaque anguli analis albido-roseis, macula dorsi postica transversa plumbea; post. griseis; capite ochreo.

♂. 12 mm. Head yellow-ochreous, face ochreous-whitish. Palpi whitish-ochreous, terminal joint black except anterior edge. Antennæ dark fuscous, obscurely spotted with whitish. Thorax dark fuscous. Abdomen grey. Legs blackish, banded with white. Forewings elongate-lanceolate; blackish; a very obscure oblique leaden-grey fascia very near base; a narrow oblique silvery-white fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, becoming leaden-grey at lower extremity; a small subquadrate silvery-white spot on middle of costa; a leaden-grey metallic outwardly oblique spot from inner margin at  $\frac{3}{4}$ , reaching half across wing; a triangular rosy-white spot on costa at  $\frac{4}{5}$ , and a similar spot on anal angle, opposite but not meeting: cilia dark fuscous, on costal spot rosy-white. Hindwings and cilia grey.



Larva cylindrical, tapering at extremities; ochreous-brown, posterior margin of all segments rather broadly white; head and second segment black, posterior margin of both white; anal segment black. Feeds between spun-together phyllodia and stem of *Acacia suaveolens*, in August.

The question of the distinctness of this species from the preceding is very perplexing; there is practically no difference between the imagos except in the pronounced rosy suffusion of the posterior spots in *M. rhodospila*, which may not prove constant, and would in any case be very probably perceptible only in bred specimens; but on the other hand the larvæ and food-plants are entirely different. Further observations are required on the present species; but meanwhile I think it impossible to describe the two forms under the head of one species.

Sydney, New South Wales; several larvæ found, and one specimen bred in September.

496. *Macr. synastra*, n. sp.

Parva, alis ant. saturate æreo-fuscis, basi albido-mixta, fascia antica angusta obliqua subtus grisescente, maculis costæ duabus tertiarque anguli analis minima niveis, macula dorsi postica obscura grisea, punctis disci tribus nigris; post. saturatius fuscis.

♂ ♀. 11-13 mm. Head brassy-fuscous, face whitish. Palpi ochreous-whitish, apex of second joint infuscated, terminal joint blackish. Antennæ black, spotted with white. Thorax bronzy-fuscous, apex of patagia sometimes whitish. Abdomen dark grey. Legs blackish, banded with white. Forewings elongate-lanceolate; dark bronzy-fuscous; markings snow-white; base slightly mixed with whitish; a narrow oblique fascia from costa at  $\frac{1}{4}$ , not quite reaching inner margin, becoming more or less greyish beneath; a subquadrate spot in middle of costa; a wedge-shaped rather inwardly oblique spot on costa at  $\frac{3}{4}$ ; a very small triangular spot on anal angle nearly meeting this; a very obscure irregular oblique purplish-grey spot on inner margin at  $\frac{2}{3}$ ; three small round black discal spots, first beneath apex of median costal spot,



second on fold before middle, third in disc at  $\frac{2}{3}$ : cilia fuscous, with two obscure darker lines, on costal spot white. Hindwings rather dark bronzy-fuscous; cilia fuscous.

George's Bay, Tasmania; eight specimens in December and January.

497. *Macr. crymalea*, n. sp.

Parva, alis ant. saturate fuscis, fascia antica angusta obliqua, in dorso ♂ cum basi, ♀ cum macula proxima per strigam connexa, maculis costæ duabus, tertia dorsi postica, quarta anguli analis minima niveis, ad dorsum ochreo-tinctis; post. fuscis, ♂ area disci antica nigro-conspersa,

♂ ♀. 12 mm. Head fuscous, face whitish. Palpi whitish, terminal joint with blackish line on each side. Antennæ blackish, spotted with whitish. Thorax ochreous-white, anterior margin dark fuscous, centrally expanded into a quadrate spot. Abdomen grey. Legs dark fuscous, banded with white. Forewings elongate-lanceolate; markings snow-white, becoming ochreous-white towards inner margin; a narrow oblique fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, in ♂ connected with base by a thick streak along inner margin; a small subquadrate spot on middle of costa; a small triangular spot on inner margin at  $\frac{3}{4}$ , in ♀ connected with anterior fascia by a narrow streak along inner margin; a triangular spot on costa beyond  $\frac{3}{4}$ , and a very small spot on anal angle opposite it: cilia fuscous, on costal spot white. Hindwings fuscous, towards base semi-hyaline, in ♂ with a discal patch extending from near base to near middle strewn with black scales; cilia fuscous.

There can be no doubt that the two specimens described, which were taken together, are really the sexes of the same species; the difference of marking in the forewings is remarkable, if really a constant sexual character; the hindwings of ♂ are peculiar.

Port Lincoln, South Australia; two specimens in November; amongst *Acacia dodonæifolia*.



498. *Macr. hemitropa*, n. sp.

Minor, alis ant. saturate fuscis, fascia subbasali cum striga dorsali postice dilatata connexa dilutiori, fascia antica angusta obliqua infra obsoleta carneo-alba, maculis costæ duabis tertiaque anguli analis albis ; post. saturatius fuscis.

♀. 15 mm. Head fuscous, face ochreous-whitish. Palpi ochreous-whitish, base and apex of second joint dark fuscous, terminal joint dark fuscous except base. Antennæ blackish. Thorax and abdomen dark fuscous. Legs dark fuscous, banded with ochreous-whitish. Forewings elongate-lanceolate ; dark fuscous ; a lighter greyish-fuscous fascia very near base, continued along inner margin to anal angle as a thick streak, posteriorly dilated into a triangular spot reaching half across wing ; markings white, tinged with flesh-colour ; a rather narrow oblique fascia from costa at  $\frac{1}{4}$ , becoming obsolete in dorsal streak ; a moderate irregularly subquadrate spot on middle of costa ; a wedgeshaped inwardly oblique spot from costa at  $\frac{4}{5}$ , meeting a similar smaller spot from anal angle : cilia fuscous, on costal spot white (apex of wing damaged). Hindwings fuscous, towards apex darker ; cilia fuscous.

Wirrabara, South Australia ; one specimen in October from *Acacea acinacea*.

499. *Macr. melanargyra*, n. sp.

Minor, alis ant. nigrescentibus, fascia antica modica, altera media angusta albido-griseis, ad costam niveis, macula costæ postica punctoque anguli analis niveis ; post. saturate æreo-fuscis.

♀. 14 mm. Head and thorax pale shining grey, face white, back of crown black. Palpi white, apex of second joint black, terminal joint with black line on each side. Antennæ black, spotted with white. Abdomen dark grey. Legs blackish, banded with white. Forewings elongate-lanceolate, blackish ; markings snow-white, both fasciæ suffused with pale shining grey except on costa ; a moderate fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, somewhat narrowed on costa ; a narrow slightly curved fascia from middle of



costa to  $\frac{2}{3}$  of inner margin; a moderate subtriangular inwardly oblique spot on costa at  $\frac{5}{6}$ ; a very small spot on anal angle: cilia blackish-grey, on costal spot white, apical third white between apex and anal angle. Hindwings dark bronzy-fuscous; cilia dark fuscous.

Brisbane, Queensland; one specimen in September.

500. *Macr. constrictella*, Walk.

(*Gelechia constrictella*, Walk. 647.)

Minor, alis ant. saturate æreo-fuscis, fasciis tribus angustis dilute aureis metallicis; post. saturatius fuscis.

♂ ♀. 13-16 mm. Head shining fuscous, face silvery-whitish. Palpi dark bronzy-fuscous, anterior edge white, second joint white towards base. Antennæ blackish, spotted with white, apical half wholly white except tip. Thorax dark bronzy-fuscous, patagia metallic golden-white. Abdomen purplish-grey. Legs blackish, banded with white. Forewings elongate-lanceolate; dark bronzy-fuscous; three slender pale golden-metallic fasciæ, forming white dots on costa; first from costa at  $\frac{1}{4}$ , rather oblique, not reaching inner margin; second from middle of costa to  $\frac{2}{3}$  of inner margin; third from  $\frac{4}{5}$  of costa to anal angle: cilia dark fuscous, with a snow-white spot above third fascia. Hindwings and cilia rather dark fuscous.

Sydney, New South Wales; Mount Lofty, South Australia; five specimens in December and March.

501. *Macr. ceraunobola*, n. sp.

Media, alis ant. saturate fuscis, fascia antica angusta dorsum non attingente, maculis costæ duabus, puncto disci sub medio alteroque anguli analis erecto canis, striga plicæ interrupta punctoque disci postico nigris; post æreo-fuscis, basim versus grisescentibus.

♂ ♀. 19-20 mm. Head bronzy-fuscous, sides of crown yellow-ochreous, face ochreous-whitish. Palpi ochreous-whitish, terminal joint with dark fuscous line on each side. Antennæ dark fuscous, spotted with whitish. Thorax dark fuscous, apex of patagia whitish. Abdomen pale yellow-ochreous. Legs dark fuscous,



banded with ochreous-whitish. Forewings elongate-lanceolate; dark fuscous, slightly purplish-tinged; base of inner margin slenderly whitish, margined above by a black streak; a narrow oblique white fascia from costa at  $\frac{1}{5}$ , becoming obsolete on fold, anteriorly margined by a blackish suffusion; a small subquadrate white spot on middle of costa; a white dot below middle of disc, connected with anterior fascia by a blackish streak along fold; a black dot in disc at  $\frac{2}{3}$ ; a rounded-triangular white spot on costa beyond  $\frac{3}{4}$ ; a small erect linear white mark on anal angle: cilia rather dark fuscous, becoming greyish-ochreous beneath anal angle, on costal spot white. Hindwings grey, posteriorly becoming bronzy-fuscous; cilia pale greyish-ochreous, more fuscous round apex.

Larva undescribed; feeds between spun-together flowers and phyllodia of *Acacia glaucescens*, in October.

Sydney and Blackheath (3,500 feet), New South Wales; Melbourne, Victoria; Hobart, Tasmania; in November and January, five specimens.

502. *Macr. anemodes*, n. sp.

Minor, alis ant. saturatius fuscis, linea antica transversa nigra, maculis costæ duabus obscurioribus albido-ochreis, punctis disci duobus nigrescentibus; post. fuscis, basim versus dilutioribus.

♂ ♀. 16-18 mm. Head and thorax rather dark fuscous. Palpi fuscous, terminal joint dark fuscous, apex whitish. Antennæ dark fuscous. Abdomen pale greyish-ochreous. Legs dark fuscous, ringed with whitish. Forewings elongate-lanceolate; rather dark fuscous; base of inner margin slenderly ochreous-whitish, margined above by a black streak; an irregular black line from  $\frac{1}{6}$  of costa to  $\frac{1}{3}$  of inner margin, followed towards costa by a few whitish-ochreous scales; a small obscure whitish-ochreous spot on middle of costa, sometimes almost obsolete; a black dot on fold before middle, and a dark fuscous dot in disc at  $\frac{2}{3}$ , tending to be preceded by an obscure whitish-ochreous dot; a small triangular tolerably defined whitish-ochreous spot on costa at  $\frac{4}{5}$ ; sometimes an obscure whitish-ochreous dot on anal angle: cilia fuscous,



beneath anal angle paler, on costal spot ochreous-whitish. Hindwings light grey, posteriorly suffused with bronzy-fuscous; cilia light fuscous.

Larva elongate, cylindrical, somewhat tapering posteriorly; rather light yellowish-green; spots minute, black; head ochreous; second segment greenish-ochreous. Feeds in loosely spun terminal shoots of *Acacia* sp.—, in October. Pupa in a firm cocoon covered with refuse. The *Acacia* on which I found these larvæ is in the opinion of Prof. Tate of Adelaide an undescribed species; it is phyllodineous, and forms large bushes fifteen feet high by the side of creeks in Wirrabara Forest.

Wirrabara, South Australia; the larvæ found plentifully, and five specimens bred in December.

503. *Macr. porphyrea*, n. sp.

Minor, alis ant. saturate purpureo-fuscis, punctis costæ duobus tertioque disci postico minimis albido-ochreis; post. griseis; capite ochreo.

♂ ♀. 15-16 mm. Head yellow-ochreous. Palpi yellow-ochreous, terminal joint dark fuscous, apex whitish. Antennæ blackish. Thorax dark purplish-fuscous. Abdomen grey. Legs dark fuscous, banded with ochreous-white. Forewings elongate-lanceolate; dark purplish-fuscous; three minute ill-defined whitish-ochreous dots; first on costa in middle, second in disc at  $\frac{2}{3}$ , third in costal cilia at  $\frac{4}{5}$ ; cilia fuscous, tips and two obscure posterior lines grey-whitish. Hindwings grey, base paler; cilia light grey.

Larva undescribed; feeds among irregularly spun-together flowers and phyllodia of *Acacia myrtifolia*, in September.

Sydney, New South Wales; two specimens bred in October.

504. *Macr. nephelomorpha*, n.sp.

Minor, alis ant. saturatius æreo-fuscis, striga antica obliqua nigra dorsum non attingente, puncto costæ medio saepius obsoleto maculaque postica minima ochreo-albidis, punctis disci tribus nigrescentibus; post. fuscis, basim versus dilutioribus.

♂ ♀. 13-17 mm. Head and thorax rather dark bronzy-fuscous. Palpi ochreous-whitish, fuscous-tinged, terminal joint with blackish



line on sides except at apex. Antennæ blackish, obscurely spotted with pale. Abdomen grey. Legs dark fuscous, obscurely ringed with ochreous-whitish. Forewings elongate-lanceolate ; rather dark bronzy-fuscous or ochreous-brown, irregularly irrorated with dark fuscous, sometimes purplish-tinged ; an obscure oblique blackish streak from costa at  $\frac{1}{6}$ , reaching to fold ; an obscure blackish dot in middle of disc, a second on fold obliquely before first, and a third in disc at  $\frac{2}{3}$  ; an ochreous-whitish dot on middle of costa, sometimes absent ; a very small distinct ochreous-whitish spot in costal cilia at  $\frac{4}{5}$  : cilia fuscous, below anal angle lighter. Hindwings bronzy-fuscous, lighter towards base ; cilia fuscous.

Larva undescribed ; feeds in spun-up leaflets of *Acacia decurrens*, in September.

Toowoomba (2,000 feet), Queensland ; Sydney, New South Wales ; Hobart, Tasmania ; from October to January ; ten specimens.

505. *Macr. brontodes*, n. sp.

Minor, alis ant. saturatius fuscis, fascia antica directa interdum obsoleta, maculis costæ duabus tertiaeque dorsi obscura albido-ochreis, annulo disci postico saturate fusco ; post. fuscis ; capite albido-ochreo.

♀. 14-15 mm. Head and palpi pale whitish-ochreous, terminal joint of palpi with blackish line on each side. Antennæ dark fuscous, obscurely spotted with whitish-ochreous. Thorax dark fuscous. Abdomen fuscous. Legs dark fuscous, suffusedly banded with whitish-ochreous. Forewings elongate-lanceolate ; fuscous, purplish-tinged, densely irrorated with dark fuscous ; markings pale ochreous or whitish-ochreous, suffusedly margined with dark fuscous ; a moderate direct fascia from  $\frac{1}{4}$  of costa to  $\frac{1}{3}$  of inner margin, nearly obsolete on costa, sometimes throughout ; a small irregular spot on middle of costa ; a very obscure spot on inner margin at  $\frac{3}{5}$ , separated from costal spot by a dark fuscous suffusion ; an obscure dot in disc at  $\frac{2}{3}$ , surrounded by a distinct dark fuscous ring ; a small subtriangular spot on costa at  $\frac{4}{5}$  ; an obscure ochreous-whitish dot on anal angle : cilia whitish-ochreous, with two cloudy



fuscous shades, on middle of hindmargin and above apex broadly barred with fuscous, on costal spot whitish. Hindwings fuscous; cilia light fuscous, towards base whitish-ochreous.

Rosewood, Queensland; three specimens amongst dense scrub in September.

506. *Macr. myriophthalma*, n. sp.

Minor, alis ant. saturate purpureo-fuscis, fascia antica angusta obliqua, maculis costæ duabus parvis, etiam dorsi duabis minoribus, punctoque disci postico albido-ochreis, nigro-cinctis; post. saturatius fuscis; capite fusco, utrinque lutescente.

♂ ♀. 14-16 mm. Head shining fuscous, sides whitish-ochreous. Palpi whitish-ochreous mixed with blackish, terminal joint with blackish line on each side. Antennæ dark fuscous, obscurely spotted with whitish-ochreous. Thorax dark purplish-fuscous. Abdomen grey. Legs dark fuscous, banded with ochreous-whitish. Forewings elongate-lanceolate; dark purple-fuscous; markings whitish-ochreous, margined with black, well-defined; a narrow fascia from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, obsolete at lower extremity; a small spot on middle of costa, and a smaller one opposite it on inner margin; a dot in disc at  $\frac{2}{3}$ ; a small triangular spot on costa at  $\frac{4}{5}$ , and a much smaller spot on anal angle opposite: cilia fuscous, on costal spot whitish-ochreous. Hindwings rather dark fuscous; cilia fuscous.

Larva undescribed; feeds in spun-up leaflets of *Acacia pubescens*, in August.

Brisbane, Queensland; Sydney, New South Wales; Melbourne, Victoria; in September, November, and March, rather common.

507. *Macr. chrysospila*, n. sp.

Minor, alis ant. purpureo-fuscis, macula basali parva, fascia antica augustiori dorsum non attingente, maculis costæ duabus, tertia dorsi, quarta anguli analis parva, puncto etiam disci postico flavis, nigrescenti-cinctis; post. saturatius griseis.

♂ ♀. 14-16 mm. Head pale shining fuscous, sides ochreous-yellow. Palpi whitish-yellowish, somewhat mixed with dark



fuscous, terminal joint with dark fuscous line on each side. Antennæ dark fuscous, spotted with whitish-yellowish. Thorax bronzy-fuscous, with a small yellowish posterior spot. Abdomen fuscous, becoming pale ochreous-yellowish towards base. Legs dark fuscous, banded with whitish-yellowish. Forewings elongate-lanceolate; purplish-fuscous, margins suffusedly irrorated with dark fuscous; markings ochreous-yellow, suffusedly margined with dark fuscous; a small basal spot; a rather narrow irregular oblique fascia from  $\frac{1}{5}$  of costa, not reaching inner margin; an irregular spot about middle of costa, and a second on inner margin opposite; a small round spot in disc at  $\frac{2}{3}$ ; a trapezoidal spot on costa at  $\frac{4}{5}$ , and a smaller triangular spot on anal angle: cilia fuscous, beneath anal angle paler, on costal spot yellow. Hindwings rather dark grey; cilia pale fuscous.

Brisbane, Queensland; four specimens in September.

#### 70. SATRAPIA, Meyr.

Head smooth, sidetufts small, closely appressed. Antennæ in ♂ with long fine cilia (4), basal joint moderate, with moderate pecten. Palpi rather short, second joint not nearly reaching base of antennæ, slender, smoothly scaled, terminal joint shorter than second, slender, curved. Thorax smooth. Forewings broadly-lanceolate. Hindwings half as broad as forewings, lanceolate, acute, cilia  $2\frac{1}{2}$ -3. Abdomen moderately broad. Posterior tibiae clothed with long fine hairs above. Forewings with vein 7 to costa, lower angle of cell obsolete. Hindwings normal.

Nearly allied to *Oecophora*, of which it is a development. The larva of the single species is a leaf-miner, and has the legs in a partially rudimentary condition.

#### 508. *Satr. thesaurina*, n. sp.

Parva, alis ant. aurantiacis, fascia antica costam non attingente nigra, antice per lineam griseam metallicam in costam productam marginata, lineis disci longitudinalibus tribus griseis metallicis, fascia marginis postici nigrescente; post. saturate fuscis.



♂ ♀. 10-12 mm. Head, palpi, antennæ, thorax, abdomen, and legs shining rather dark grey; palpi internally whitish; patagia orange. Forewings lanceolate; orange; two metallic grey dots transversely placed very near base, upper connected with base of costa, and lower with middle of base of wing, by black dots; a thick black erect streak from middle of inner margin, reaching  $\frac{3}{4}$  across wing, dilated at base, anteriorly margined with metallic grey, its apex connected with  $\frac{1}{5}$  of costa by an oblique metallic grey line; three parallel linear longitudinal metallic grey streaks in disc, anteriorly terminating in black erect streak, posteriorly reaching to near hindmarginal border; a narrow blackish hindmarginal border, extending from apex to below anal angle, rather dilated at extremities: cilia dark fuscous. Hindwings and cilia dark fuscous.

Larva with abdominal legs rudimentary, almost obsolete; elongate, gradually tapering posteriorly from sixth segment; dull light ochreous-reddish; head small, black; second segment broader than head, narrower than third, dark fuscous, anteriorly lighter and more ochreous; anal segment small, black. Mines a short tubular gallery, open at both ends, adjoining midrib, in leaves of *Eucalyptus tereticornus* (*Myrtaceæ*), emerging from anterior end to feed and eating holes in the leaf, ejecting excrement from posterior end; often three or four larvæ in one leaf. Pupa free within the gallery. Larva feeding in September and October.

Sydney, New South Wales; Melbourne, Victoria; Adelaide, South Australia; in October and November; rarely captured, but bred in plenty from the larva, which is locally abundant.

## APPENDIX 1.

The foregoing species complete the original scheme of the family; but as the publication has extended over a period of three years, a considerable number of additional species have come into my hands since the completion of the genera to which they are referable. These will now be added in the form of an appendix; the species will continue to be numbered in ordinal succession, but a second number will be added in brackets, which will indicate the position



of each species in relation to those already described. I propose to include in a second appendix additional localities and notes on the species previously mentioned.

PALPARIA, Wing.

509. (4a.) *Palp. theophila*, n. sp.

Major, alis ant. margine postico sinuato, ochreo-roseis, ciliis griseis ; post. roseo-albis.

♂. 25-27 mm. Head yellow-ochreous, partially rosy-suffused. Palpi with tuft of second joint dense, as long as terminal joint ; dull rosy, upper edge of tuft and terminal joint whitish. Antennæ white. Thorax yellowish-rosy. Abdomen white. Legs rosy-white. Forewings moderate, costa strongly arched, apex acute, not produced, hindmargin slightly sinuate, oblique ; bright rosy, slightly ochreous-tinged ; extreme base yellowish ; costal edge yellow-whitish : cilia of hindmargin grey, base purplish-rosy. Hindwings rosy-white ; cilia white.

Nearest to *P. rectiorella*, but immediately separated by the deep rosy colour and grey hindmarginal cilia ; the hindwings in *P. rectiorella* should have been described as pale whitish-yellowish, whereas in *P. theophila* they have no yellowish tinge.

Deloraine, Tasmania ; two specimens from *Leptospermum* in November and December.

510. (7a.) *Palp. mesophthora*, n. sp.

Media, alis ant. margine postico vix sinuato, dilute roseo-griseis, costæ punctis quattuor posticis lineisque duabus transversis obscuris, interdum etiam nebula basali magna maculave dorsi media saturate fuscis ; post. albidis, apice leviter roseo-griseo.

♂ ♀. 19-22 mm. Head, palpi, antennæ, and thorax whitish-ochreous, fuscous-tinged ; palpi with tuft of second joint reduced to a very short triangular apical projection, second joint externally fuscous, apex whitish, terminal joint nearly as long as second. Abdomen and legs whitish, anterior and middle legs suffused with dark fuscous. Forewings elongate, costa gently arched, sinuate in



middle, apex round-pointed, hindmargin slightly sinuate, oblique ; light reddish-grey, finely and thinly irrorated with dark fuscous ; costal edge ochreous-whitish except at base ; a very small cloudy dark fuscous spot on middle of costa, and three equidistant cloudy dark fuscous costal dots between this and apex ; sometimes a moderate round dark fuscous spot in middle of inner margin ; sometimes anterior half of wing obscurely suffused with rather dark fuscous ; traces of an obscure curved cloudy dark fuscous line from central costal spot to anal angle, and a similar waved line from last costal dot to anal angle ; a hindmarginal row of dark fuscous dots : cilia whitish-ochreous, base reddish-tinged, somewhat mixed with dark fuscous, and with a dark fuscous spot at apex. Hindwings whitish, apex pale greyish ; cilia whitish, towards apex rosy-tinged.

A variable species, most allied to *P. micrastrella*, but not capable of being confused with it.

Deloraine and Mount Wellington (2,500 feet), Tasmania ; three specimens amongst *Leptospermum* in November and December.

511. (8a.) *Palp. hesychæa*, n. sp.

Media, alis ant. dilutissime griseo-ochreis, lineis transversis nebulosis subcurvis tribus saturatoribus, punctis costæ posticis tribus saturate fuscis ; post. exalbidis.

♀. 22 mm. Head, palpi, antennæ, and thorax whitish, finely irrorated with pale greyish-ochreous ; tuft of palpi dense, nearly as long as terminal joint. Abdomen and legs whitish, anterior tibiæ and tarsi fuscous. Forewings moderate, dilated posteriorly, costa slightly arched, apex round-pointed, hindmargin rather sinuate, somewhat oblique ; very pale whitish-ochreous, greyish-tinged ; three indistinct cloudy greyish-ochreous transverse lines, somewhat curved ; first from  $\frac{1}{3}$  of costa to middle of inner margin, second from middle of costa to  $\frac{3}{4}$  of inner margin, third from  $\frac{3}{4}$  of costa to anal angle ; three dark fuscous dots on costa between middle and apex : cilia ochreous-whitish, round apex and upper half of hindmargin with a cloudy dark fuscous terminal line. Hindwings and cilia whitish, slightly ochreous-tinged.



Allied to *P. euryphanella*, but differing conspicuously in the very pale forewings, without fuscous tinge, and whitish hindwings.

Mount Kosciusko, (4700 feet). New South Wales ; one specimen in January.

512. (11a.) *Palp. lithocosma*, n. sp.

Media, alis ant. angustis, subfalcatis, ochreo-rubris, fascia lata media angulata grisea niveo-marginata ; post. dilutius griseis.

♀. 21 mm. Head grey, sidetufts whitish. Palpi with second joint long, tuft rather short, dense, terminal joint about half second ; second joint reddish-fuscous, upper edge white, terminal joint whitish. Antennæ grey. Thorax grey, patagia whitish. Abdomen light grey. Legs reddish-grey, hairs of posterior tibiæ whitish. Forewings elongate, rather narrow, costa moderately arched, apex strongly produced, acute, hindmargin sinuate, very oblique ; ochreous-red ; a pale ochreous-yellowish suffusion forming a very obscure angulated anterior fascia ; two snow-white, anteriorly fuscous-edged, posteriorly ill-defined, transverse lines, acutely angulated in middle, bent inwards below middle, first from  $\frac{1}{3}$  of costa to fold before middle, second from  $\frac{3}{5}$  of costa to anal angle, included space brownish-grey ; second line margined posteriorly by a light ochreous-yellowish suffusion : cilia grey, reddish-tinged. Hindwings rather light grey ; cilia whitish-grey.

Allied to *P. falcifera*, but very different.

One specimen, as to the locality of which I have not yet received information, in the collection of Dr. Lucas, of Melbourne.

ENCHOCRATES, Meyr.

513. (14a.) *Ench. picrophylla*, n. sp.

Media, alis ant. dilute ochreo-griseis, costa, venis, lineisque tribus transversis valde curvatis obscuris carneis, punctis disci duobus serieque marginis postici saturate fuscis ; post. griseo-albidis.

♂. 20-21 mm. Head, palpi, antennæ, and thorax pale ochreous-greyish ; antennæ rosy-tinged towards base. Abdomen light grey. Legs whitish, anterior pair dark grey, tibiæ rosy, middle tarsi grey except apex of joints. Forewings oblong, moderately broad,



costa moderately arched, strongly towards base, apex rounded, hindmargin obliquely rounded; pale ochreous-grey; costal edge, inner margin, and all veins obscurely lined with dull flesh-colour; a fuscous dot beneath costa at  $\frac{1}{6}$ ; a dark fuscous dot on fold before middle, and a second in disc at  $\frac{2}{3}$ ; three very obscure dull flesh-colour transverse lines, first from  $\frac{1}{3}$  of costa, becoming obsolete beneath, second from middle of costa to anal angle, very strongly angulated in middle, third from  $\frac{3}{4}$  of costa to anal angle, strongly curved above middle; a row of well-defined dark fuscous dots along hindmargin and apical part of costa; cilia whitish-grey, tips pale rosy round apex. Hindwings and cilia grey-whitish.

A much duller insect than *E. glaucopis*, easily distinguished by the absence of the bright rosy tints and of the pale yellowish dorsal spot with its attendant markings.

Sydney, New South Wales; Mount Lotty, South Australia (Mr. E. Guest); in June; two specimens.

#### EOCHROIS, Meyr.

I have altered this name to its present form, on the ground that *Eochroa* has been previously employed by Felder for a genus of *Lepidoptera*.

#### 514. (24a.) *Eochr. tritoxantha*, n. sp.

Media, alis ant. fusco-purpureis, area basali flava, puncto disci postico luteolo; post. griseis.

♂. 18 mm. Head, palpi, and thorax deep yellow. Antennæ dark fuscous, spotted with white. Abdomen grey. Legs dark grey, apex of joints white, posterior pair whitish. Forewings moderately elongate, costa gently arched, apex round pointed, hindmargin rather strongly sinuate, oblique; fuscous-purplish, becoming fuscous towards costa posteriorly; basal third deep yellow, bounded by a line from  $\frac{1}{3}$  of costa to middle of inner margin; costal edge whitish-ochreous on posterior half; a whitish-ochreous dot in disc at  $\frac{2}{3}$ ; cilia whitish, with a dark grey apical spot, basal half dark grey on upper half of hindmargin, and a grey spot on anal angle. Hindwings grey; cilia whitish-grey.

Very distinct from any other; in form of wing nearest *E. acutella*.



Deloraine, Tasmania; one specimen from *Leptospermum* in December, taken after dark.

ZONOPETALA, Meyr.

515. (30a.) *Zon. synarthra*, n. sp.

Media, cana, thorace antice nigro, alis ant. costæ basi, fascia antica, altera postica angustiore antice ochreo-marginata, punctoque disci postico transverso nigris; post. luteolis, postice griseo-suffusis.

♂ ♀. 15-21 mm. Head white. Palpi white, lower half of second joint blackish. Antennæ dark fuscous. Thorax white, anterior half blackish. Abdomen pale yellowish-ochreous. Legs dark fuscous, posterior pair pale yellowish-ochreous. Forewings moderate, costa moderately arched, apex round pointed, hindmargin hardly rounded, oblique; white, sometimes faintly yellowish-tinged; markings blackish; a small spot on base of costa; two straight fasciæ, their posterior edges irregularly dentate; first moderate, from  $\frac{2}{5}$  of costa to beyond middle of inner margin; second narrow, anteriorly generally suffusedly margined with whitish-ochreous, from  $\frac{3}{4}$  of costa to anal angle; a transverse linear dot in disc between these, nearer second; beneath this a cloudy grey dot; a cloudy grey spot on hindmargin beneath apex; a dot on costa before apex, and a hindmarginal line, interrupted above anal angle: cilia whitish-ochreous, basal half on hindmargin white spotted with grey, with a blackish apical spot. Hindwings whitish-ochreous, apex greyish, in ♀ wholly grey except towards base; cilia whitish-ochreous, with a cloudy grey basal line.

Differs from all by the conspicuous separate black discal dot; the nearest species is *Z. decisana*, in which alone the discal dot is present, but united at its lower extremity with the anterior fascia, and the posterior markings are reddish-brown.

Mount Kosciusko (4,700 feet), New South Wales, in January; Quorn, South Australia, in October; locally rather common.

516. (31a.) *Zon. erythrosema*, n. sp.

Media, carnea, alis ant. macula disci antica partim rubro-marginata fasciæque postica sinuata antice suffusa nigricantibus; post. griseis.



♂. 18 mm. Head whitish. Palpi rosy-whitish, basal half of second joint blackish. Antennæ grey. Thorax pale flesh-colour. Abdomen grey. Legs grey, posterior pair whitish. Forewings moderate, costa moderately arched, apex rounded, hindmargin almost straight, oblique; light rosy-pink; a moderately large irregular angular black spot somewhat before middle, resting on fold, margined posteriorly and beneath by a red line; a moderate blackish fascia from  $\frac{2}{3}$  of costa to anal angle, sinuate inwards above middle, anteriorly suffused into fuscous, posteriorly sharply defined and somewhat whitish-edged; a patch on hindmargin beneath apex somewhat mixed with grey: cilia pale flesh-colour mixed with grey. Hindwings grey; cilia whitish-grey.

A very distinct species, intermediate between the two main groups of the genus.

George's Bay, Tasmania; one specimen in January.

#### HELIOCAUSTA, Meyr.

##### 517. (36a.) *Hel. atœcha*, n. sp.

Minor, alis ant. saturate carneis, pallido-sparsis, punctis disci tribus serieque marginis postici perobscuris griseis; post. flavidis, ♀ partim griseo-mixtis, ciliis luteis.

♂ ♀. 16-18 mm. Head and thorax reddish-brown, strewn with whitish-ochreous. Palpi ochreous-whitish, rosy-tinged. Antennæ whitish, sharply annulated with dark fuscous. Abdomen whitish-yellowish. Legs yellow-whitish, anterior tibiæ and tarsi dull rosy. Forewings moderate, costa moderately arched, apex roundpointed, hindmargin straight, rather oblique; reddish-brown or deep flesh-colour, strewn with whitish-ochreous scales; markings formed by a few dark grey scales, very obscure; a dot in disc at  $\frac{2}{5}$ , a second rather beyond first on fold, and a third in disc at  $\frac{2}{3}$ ; a small spot on costa at  $\frac{1}{3}$ , a second in middle, and a row of hardly distinguishable dots on apical third of costa and hindmargin: cilia pale rosy, towards tips whitish. Hindwings pale ochreous-yellowish, in ♀ somewhat mixed with grey before apex and towards dorsal margin; cilia pale ochreous-yellowish.



Nearest to *H. limbata*, which it closely resembles in the forewings, but immediately distinguished by the entire absence of the dark border to the hindwings, and the pale yellowish cilia.

Sydney, New South Wales; four specimens on a fence in October.

518. (43a.) *Hel. eudoxa*, n. sp.

Media, alis ant. griseo-luteis, puncto plicæ, altero disci maculam parvam superjacentem, linea postica costam non attingente, striga marginis postici nebulosa in dorsum medium perducta saturatus fusco-purpureis; post. flavis, ciliis saturate griseis.

♂ ♀. 21-25 mm. Head bright yellow. Palpi whitish-ochreous. Antennæ fuscous. Thorax light greyish-ochreous, more or less suffused irregularly with dark fuscous-purplish except on patagia. Abdomen fuscous, margins yellowish. Legs whitish-ochreous, anterior and middle pair suffused with fuscous above. Forewings moderate, costa moderately arched, apex obtuse, hindmargin nearly straight, somewhat oblique, rounded beneath; greyish-yellowish or whitish-grey; costal edge pale yellowish; markings dull fuscous-purplish; a narrow obscure suffusion along inner margin from middle to anal angle; a dot on fold beneath middle, and a larger one in disc at  $\frac{2}{3}$ ; a small cloudy spot beneath second dot; a waved line from near hindmargin above middle to anal angle; a cloudy line along hindmargin dilating gradually to apex: cilia whitish, basal half rosy or purplish-tinged, towards anal angle and at apex greyish. Hindwings ochreous-yellow, basal hairs greyish; cilia dark grey, tips paler.

Closely allied to *H. paralyrgis* (of which I have now a series), but readily separated by the forewings being more or less greyish, not clear yellow-ochreous, and by the absence of the broad purple band which in *H. paralyrgis* extends along the hindmargin and posterior part of inner margin so as to absorb the other markings. Whether the species will remain as readily separable when forms from intermediate localities are known, is yet to be seen.

Larva stout, broadly flattened, broadest in middle; ochreous-whitish, towards sides slightly tinged with purplish-rosy; head



dark brown; second segment blackish-fuscous, anterior margin ochreous-whitish; third and fourth segments with dark fuscous marks towards sides. Feeds on *Eucalyptus leucoxylon*, between a leaf and a piece cut from another leaf, forming an oblong slightly dilated chamber, in October. Pupa in a case formed of two oblong pieces of leaf joined by the edges, made by cutting out the larval habitation, and attached at each end by threads to the trunk; enclosed in a firm cocoon within the case. This larval habit is similar to that of *H. paralyrgis*.

Quorn, South Australia, in October and November; two specimens captured and a third bred.

519. (41a.) *Hel. epidesma*, n. sp.

Media, alis ant. flavis, basi, fascia post medium subconica, altera marginis postici supra latiore cum hac infra confluyente saturatius cupreo-fuscis; post. saturatius cupreo-fuscis.

♀. 19 mm. Head ochreous-yellow. Palpi whitish-yellowish, second joint becoming fuscous towards base. Antennæ, thorax, abdomen, and legs dark fuscous; posterior tibiæ and apex of tarsal joints yellowish. Forewings moderately elongate, posteriorly somewhat dilated, costa gently arched, apex obtuse, hindmargin almost straight, rather oblique; ochreous-yellow; base narrowly coppery-fuscous; two rather dark coppery-fuscous fasciæ; first from costa beyond middle, rather narrow at first, dilating gradually throughout, on inner margin extending from middle to anal angle; second hindmarginal, rather broad on costa, gradually attenuated to anal angle, where it coalesces with first: cilia coppery-fuscous, terminal half grey-whitish. Hindwings rather dark coppery-fuscous; cilia as in forewings.

In general appearance intermediate between *Hel. hemiteles* and *Phil. bimaculana*, but recognisable by the form of the fasciæ.

Melbourne, Victoria; one specimen received from Dr. Lucas.





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