



REVISION OF AUSTRALIAN OENOCHROMIDAE (LEPIDOPTERA). II.\*

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

[Read 26th March, 1930.]

Genus 11. BRADYCTENA, n. gen.

*βραδυκτενος*, with heavy comb.

Face smooth. Tongue present. Palpi moderate, porrect. Antennae in ♂ unipectinate, the pectinations short (1), and almost as broad as long, extreme apex simple. Thorax and abdomen slender; thorax not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with tufts of raised scales; 9, 10 arising from end of cell, connate or even short-stalked with 7 and 8, anastomosing with 8 to form the areole from which 8, 9, 10 arise by a common stalk, 11 free. Hindwings with 3 nearer 4 than 2 at origin, 6 and 7 connate, 12 approximated to cell to about two-thirds, thence diverging.

A curious modification of the *Dichromodes* group. It does not seem specially allied to *Phrixocomes*. There is only one species and of that only the type is at present known.

65. BRADYCTENA TRYCHNOPTILA.

*Dichromodes trychnoptila* Turn., *Trans. Roy. Soc. S. Aust.*, 1906, 131.  
Tasmania: Zeehan.

Genus 12. PHRIXOCOMES, n. gen.

*φριξοκομης*, with bristling hair.

Face smooth. Tongue well-developed. Palpi long or very long, porrect, thickened, with loosely appressed hairs. Antennae in ♂ unipectinate, extreme apex simple. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with tufts of raised scales, areole present, 8, 9, 10 arising from areole by a common stalk, 11 free. Hindwings with 3 arising midway between 2 and 4, 6 and 7 closely approximated at origin or connate, 12 closely approximated to cell to about four-fifths, thence diverging.

Type, *P. ptilomacra* Low.

A small genus near *Dichromodes*, distinguished by the tufts on forewings, wide separation of 3 and 4 of hindwings, and long palpi, though the last character is shared by some species of the former genus.

*Key to Species.*

1. Forewings with longitudinal sinuate line ..... *nexistriga*. 66
- Forewings without longitudinal line ..... 2
2. Palpi 4 to 6; antennal pectinations 4 ..... *steropias*. 67
- Palpi 7 to 8; antennal pectinations 10 ..... *ptilomacra*. 68

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\* Continued from these PROCEEDINGS, liv, 1929, 504.



## 66. PHRIXOCOMES NEXISTRIGA.

*Dichromodes steropias* ab. *nexistriga* Warr., *Novit. Zool.*, 1900, 101.—  
*Dichromodes nexistriga* Prout, *Gen. Insect.*, *Oenochrom.*, p. 26.

Not having seen this I can add nothing to Warren's brief description. According to Prout it is certainly a distinct species.

North-west Australia: Roeburne.

## 67. PHRIXOCOMES STEROPIAS.

*Dichromodes steropias* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1182. This also I have not seen.

Western Australia: Perth, Geraldton.

## 68. PHRIXOCOMES PTILOMACRA.

*Dichromodes ptilomacra* Low., *Trans. Roy. Soc. S. Aust.*, 1892, 8.

♂. 28-30 mm. Head and thorax fuscous irrorated with whitish. Palpi 7 to 8; whitish-grey irrorated with dark fuscous. Antennae fuscous; pectinations in ♂ 10. Abdomen grey. Legs fuscous; posterior pair ochreous-whitish. Forewings triangular, rather narrow, costa strongly arched, apex round-pointed, termen rounded, slightly oblique; pale fuscous sparsely irrorated with dark fuscous; tufts of raised scales beneath costa at one-fourth, and two-fifths, in middle of disc, and on cubital vein at one-third; antemedian line from one-fourth costa to one-fourth dorsum, slender, dark fuscous, edged anteriorly with white, dentate, very acutely angled outwards in middle, its apex reaching fourth tuft; discal dot formed by third tuft, dark fuscous edged with white posteriorly; postmedian line from four-fifths costa to two-thirds dorsum, slender, dark fuscous, edged posteriorly with white, straight, acutely dentate; a finely dentate white subterminal line preceded by a dark shade; an interrupted dark fuscous terminal line; cilia fuscous, bases barred with white. Hindwings rather elongate, termen rounded; grey; cilia grey, apices paler.

South Australia: Mt. Lofty, Port Victor.

## Genus 13. DICHROMODES.

Gn., *Lep.*, ix, 320; Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1167; Prout, *Gen. Insect.*, *Oenochrom.*, p. 23.

Type, *D. ainaria* Gn.

Face with short projecting tuft of scales. Tongue present. Palpi moderate or long, porrect, thickened above and beneath with loosely appressed hairs; terminal joint concealed. Antennae of ♂ unipectinate, near apex simple. Thorax and abdomen slender; the former not or only slightly hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with 11 free but closely approximated to areole, 9, 10 anastomosing with 8 to form the single areole, from which 8, 9, 10 arise by a common stalk. Hindwings with 6 and 7 separate but approximated at origin, 12 closely approximated to cell to three-fourths or more, thence diverging.

A large genus, some of the species of which are not easy to distinguish. Structural points such as the length of the palpi, and of the antennal pectinations in the ♂, must be carefully observed. The genus is distinctively Australian but has reached New Zealand, where it is represented by five indigenous species.



*Key to Species.*

1. Palpi whitish-grey or whitish-brown; hind tibiae of ♂ much swollen ..... 2  
    Palpi not so; hind tibiae of ♂ not or only slightly dilated ..... 4
2. Palpi with base sharply white ..... *ischnota*. 69  
    Palpi with base not white ..... 3
3. Forewings with transverse median band ..... *molybdaria*. 70  
    Forewings without median band ..... *estigmaria*. 71
4. Palpi whitish ..... 5  
    Palpi blackish or fuscous ..... 6
5. Forewings whitish without fuscous irroration or ochreous streaks .. *galactica*. 72  
    Forewings with fuscous irroration and ochreous streaks ..... *perinipha*. 73
6. Palpi with white or whitish basal area usually sharply defined ..... 7  
    Palpi with at most a few whitish scales towards base ..... 43
7. Hindwings orange-yellow ..... 8  
    Hindwings not orange-yellow ..... 9
8. Forewings with basal two-thirds blackish ..... *scothima*. 75  
    Forewings with basal two-thirds not blackish ..... *laetabilis*. 76
9. Forewings suffused throughout with reddish ..... 10  
    Forewings not suffused throughout with reddish ..... 11
10. Forewings with pale-centred discal spot ..... *haematopa*. 77  
    Forewings with discal dot not pale-centred ..... *rufula*. 78
11. Forewings with interrupted reddish or ochreous streaks from base to termen 12  
    Forewings without such streaks from base to termen ..... 15
12. Forewings with antemedian line only slightly dentate ..... 13  
    Forewings with antemedian line with strong acute median tooth .... *poecilotis*. 81
13. Forewings with postmedian line straight ..... *ioneura*. 80  
    Forewings with postmedian line not straight ..... 14
14. Forewings with median band narrow; its edges slenderly whitish ..... *aesia*. 79  
    Forewings with median band moderately broad, bordered by strongly marked  
       white lines ..... *compsotis*. 83
15. Forewings with two oblique ochreous streaks ..... *euprepes*. 82  
    Forewings without oblique ochreous streaks ..... 16
16. Forewings with transverse lines nearly straight, converging on dorsum .... 17  
    Forewings with transverse lines dentate, wavy, or not converging ..... 18
17. Forewings with grey-whitish median band ..... *orthotis*. 83  
    Forewings with median band not grey-whitish ..... *orthozona*. 85
18. Forewings with grey-whitish terminal band ..... 19  
    Forewings without grey-whitish terminal band ..... 20
19. Forewings with white transverse lines ..... *partitaria*. 86  
    Forewings without white transverse lines ..... *angasi*. 87
20. Forewings with median band darker than basal and terminal areas ..... 21  
    Forewings with median band not darker than basal and terminal areas ..... 30
21. Forewings with postmedian line acutely angled in middle ..... 22  
    Forewings with postmedian line not so angled ..... 26
22. Forewings with postmedian line denticulate ..... 23  
    Forewings with postmedian line not denticulate ..... 24
23. Forewings with subterminal line angled in middle ..... *phaeostropha*. 88  
    Forewings with subterminal line not angled in middle ..... *anelictis*. 89
24. Forewings with subterminal line acutely angled in middle ..... *aristadelpha* 94  
    Forewings with subterminal line not acutely angled ..... 25
25. Forewings often with ochreous markings; subterminal line edged anteriorly and  
       sometimes interrupted by dark-fuscous ..... *diffusaria*. 95  
    Forewings without ochreous markings; subterminal line not edged anteriorly  
       with dark-fuscous ..... *mesogonia*. 96
26. Forewings with margins of median band denticulate ..... 27  
    Forewings with margins of median band not denticulate ..... 29
27. Hindwings ochreous-tinged ..... *oriphoetes*. 90  
    Hindwings not ochreous-tinged ..... 26
28. Palpi 2; antennal pectinations in ♂ 2 ..... *denticulata*. 91  
    Palpi 2½; antennal pectinations in ♂ 4 ..... *disputata*. 92
29. Forewings with a whitish-ochreous costal suffusion beyond postmedian  
       line ..... *paratacta*. 93  
    Forewings without postmedian whitish-ochreous suffusion ..... *empecta*. 97



30. Forewings with a whitish longitudinal streak from base ..... 31  
 Forewings without whitish longitudinal streak from base ..... 32
31. Forewings with a whitish subcostal streak from base to median line ..... *confluaria*. 98  
 Forewings with a short median longitudinal streak from base ..... *rostrata*. 99
32. Forewings with postmedian line strongly indented above dorsum .. *explanata*. 100  
 Forewings with postmedian line not indented above dorsum ..... 33
33. Forewings with postmedian line dentate throughout ..... 34  
 Forewings with postmedian line not dentate ..... 36
34. Forewings with discal spot annular, pale-centred ..... *obtusata*. 101  
 Forewings with discal spot not so formed ..... 35
35. Forewings with antemedian line and a parallel preceding line strongly indented below middle ..... *lissophrica*. 102  
 Forewings with antemedian line not indented ..... *exsignata*. 103
36. Forewings with discal spot annular, pale-centred ..... *orectis*. 104  
 Forewings with discal spot not so formed ..... 37
37. Forewings with costal area suffused with pale ferruginous-ochreous ..... *semicanescens*. 105  
 Forewings not so suffused ..... 38
38. Forewings with postmedian line angled in middle ..... 39  
 Forewings with postmedian line not angled in middle ..... 40
39. Forewings with transverse lines edged with blackish ..... *sigmata*. 106  
 Forewings with transverse lines not edged with blackish ..... *lygrodes*. 107
40. Forewings uniformly fuscous-grey, lines indistinct ..... 41  
 Forewings not uniformly fuscous-grey, lines distinct ..... 42
41. Forewings with two obscure blackish transverse lines towards base .. *liospora*. 108  
 Forewings without sub-basal blackish lines ..... *leptogramma*. 109
42. Forewings ochreous-grey-whitish; palpi 3; antennal pectinations 7 .... *limosa*. 110  
 Forewings grey without ochreous tinge; palpi 2½; antennal pectinations 5 .... *leptozona*. 111
43. Hindwings orange-yellow ..... *ainaria*. 74  
 Hindwings not orange-yellow ..... 44
44. Forewings with a broad dark-fuscous subdorsal streak ..... *personalis*. 112  
 Forewings without subdorsal streak ..... 45
45. Forewings without transverse lines ..... *ophiucha*. 113  
 Forewings not wholly without transverse lines ..... 46
46. Forewings without antemedian line ..... *euscia*. 114  
 Forewings with antemedian line developed ..... 47
47. Forewings with postmedian line dentate ..... 48  
 Forewings with postmedian line not dentate ..... 49
48. Palpi of ♂ 3, of ♀ 3½ ..... *indicataria*. 115  
 Palpi of ♂ 4, of ♀ 5 ..... *icelodes*. 116
49. Forewings with transverse lines broadly edged with blackish towards dorsum .. 50  
 Forewings with transverse lines not edged with blackish ..... 51
50. Palpi of ♂ 4, of ♀ 5 to 6; forewings with discal spot annular, pale-centred ..... *raynori*. 117  
 Palpi 3 to 3½; forewings with discal spot dot-like, rarely pale-centred ..... *atrosignata*. ♀ 118
51. Forewings more or less ochreous-tinged with darker median band ..... *atrosignata*. ♂ 118  
 Forewings not ochreous-tinged ..... 52
52. Forewings with postmedian line angled in middle ..... 53  
 Forewings with postmedian line not angled in middle ..... 54
53. Palpi 3½; forewings with narrow median band ..... *triparata*. 119  
 Palpi 2½; forewings with moderately broad median band ..... *mesodonta*. 120
54. Forewings with postmedian line white, strongly curved outwards on dorsum ..... *stilbiata*. 121  
 Forewings with postmedian line not so ..... 55
55. Forewings with antemedian line edged on both sides with fuscous ..... *consignata*. 122  
 Forewings with antemedian line not so ..... 56



56. Forewings with antemedian line distinct ..... 57  
 Forewings with antemedian line obscure, or represented by three fuscous dots  
 ..... *ornata*. 126
57. Forewings with antemedian line strongly dentate; antennal pectinations 6  
 ..... *rimosa*. 123  
 Forewings with antemedian line only slightly dentate; antennal pectinations 4  
 ..... 58
58. Palpi 3 to  $3\frac{1}{2}$ ; forewings with discal spot pale-centred ..... *usurpatrix*. 124  
 Palpi of ♂  $2\frac{1}{2}$ ; forewings with discal spot not pale-centred ..... *berthoudi*. 125

## 69. DICHROMODES ISCHNOTA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1189; Prout, *Gen. Insect.*, Oenochrom., Pl. 1, f. 10.

♂. 18-20 mm. ♀. 21 mm. Head grey densely irrorated with whitish. Palpi  $2\frac{1}{2}$ ; brownish-fuscous, upper surface and apex white, base sharply white. Antennae ochreous-grey-whitish; pectinations in ♂ 7. Thorax grey, densely irrorated with whitish. Abdomen ochreous-grey-whitish. Legs pale fuscous irrorated, except anterior pair, with whitish; posterior tibiae in ♂ strongly dilated. Forewings triangular, costa gently arched, apex pointed, termen slightly rounded, slightly oblique; grey densely irrorated with whitish and sometimes with a few fuscous scales; first line from two-fifths costa to two-fifths dorsum, very obscurely whitish, posteriorly edged with some fuscous dots, often obsolete; an obscure, fuscous, subcostal, discal dot beyond middle; postmedian line from four-fifths costa to two-thirds dorsum, whitish edged anteriorly with fuscous, nearly straight or slightly incurved above and below middle with a slight median angle; a very obscure, wavy, whitish, subterminal line, sometimes edged anteriorly with fuscous; a fine, dark fuscous, interrupted terminal line; cilia whitish mixed with fuscous. Hindwings with termen rounded; grey; sometimes a slender, darker, median line; cilia grey.

A very obscure little species easily overlooked, but widely distributed. I have seen no Western Australian example. This and the two following species are characterized by pale brownish or pale grey palpi and dilated male posterior tibiae.

Queensland: Duaringa, Warra near Dalby. Western Australia: Carnarvon.

## 70. DICHROMODES MOLYBDARIA.

*Panagra molybdaria* Gn., *Lep.*, x, 131.—*Panagra carbonata* Wlk., *Cat. Brit. Mus.*, xxiii, 1004.—*Dichromodes molybdaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1187.

♂, ♀. 26-29 mm. Head whitish-grey. Palpi in ♂ 3, in ♀  $3\frac{1}{2}$ ; greyish-ochreous, upper surface and apex white. Antennae ochreous-grey-whitish; pectinations in ♂ 8. Thorax pale grey. Abdomen whitish-grey. Legs grey; posterior pair whitish; posterior tibiae in ♂ strongly dilated. Forewings triangular, rather narrow, costa nearly straight, apex pointed, termen nearly straight, moderately oblique; whitish-grey often ochreous-tinged, with a few darker scales, costal edge ochreous; a faint, median, subcostal, discal dot; a moderate, grey, transverse, median band; its anterior edge slightly irregular, from two-fifths costa to two-fifths dorsum; posterior edge from three-fourths costa to two-thirds dorsum, finely dentate, bent inwards beneath middle, obtusely angled and sometimes with a ferruginous spot in middle; sometimes an obscure series of fuscous subterminal dots, that on costa



larger; a dark fuscous interrupted terminal line; cilia whitish-grey. Hindwings with termen rounded; grey; some darker irroration on dorsum; cilia grey.

Queensland: Stanthorpe. New South Wales: Sydney, Jervis Bay.

#### 71. DICHROMODES ESTIGMARIA.

*Panagra estigmara* Wlk., *Cat. Brit. Mus.*, xxiii, 1001.—*Panagra costinotata* Wlk., *ibid.*, p. 1001.—*Acidalia schistacearia* Wlk., *ibid.*, xxvi, 1609.—*Dichromodes estigmara* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1188.

North Queensland: Kuranda near Cairns, Stannary Hills near Herberton. Queensland: Nambour, Brisbane, Stradbroke Is., Southport, Coolangatta, Toowoomba, Stanthorpe. New South Wales: Sydney, Katoomba, Menangle. Victoria: Melbourne.

#### 72. DICHROMODES GALACTICA, n. sp.

γαλακτικός, milk-white.

♂. 26 mm. Head whitish. Palpi 3; whitish. Antennae whitish with fine fuscous annulations; pectinations in ♂ 6. Thorax and abdomen whitish. Legs whitish; anterior pair irrorated with fuscous. Forewings triangular, costa straight except near base and apex, apex rounded, termen slightly rounded, slightly oblique; whitish; slight fuscous irroration on costa; markings faint, formed by slight fuscous irroration in dots; a dot just beneath midcosta, a second on median vein, and a third above dorsum, represent first line; a minute discal dot at three-fifths; postmedian represented by a series of indistinct dots from three-fourths costa to three-fifths dorsum, sinuate; cilia whitish. Hindwings with termen rounded; whitish; cilia whitish. Underside whitish with postmedian discal dots on both wings.

The uniform whitish coloration makes this a very distinct species.

Western Australia: Busselton in October; two specimens received from Mr. G. M. Goldfinch, who has the type.

#### 73. DICHROMODES PERINIPHA.

*Dichromodes perinipha* Low., *PROC. LINN. SOC. N.S.W.*, 1915, 475.

♂. 28 mm. Head whitish. (Palpi broken off.) Antennae grey; pectinations in ♂ 6. Thorax grey-whitish mixed with dark fuscous and ochreous scales. Abdomen ochreous-whitish. Forewings triangular, costa straight except near base and apex, apex pointed, termen nearly straight, slightly oblique; whitish with dark fuscous irroration and markings, costal edge and all veins slenderly outlined with ochreous; a subdorsal spot near base; first line at one-fourth, transverse, coarsely dentate, not reaching margins; a large, quadrate, median, subcostal, discal spot; postmedian line from five-sixths costa to three-fourths dorsum, doubly sinuate and finely dentate, edged posteriorly with whitish; both transverse lines interrupt the ochreous neural streaks; a suffused subterminal line; a blackish crenulate terminal line; cilia grey-whitish with some darker points. Hindwings with termen nearly straight, crenulate; grey-whitish; cilia whitish.

Described from a specimen which had been compared with the type by Mr. N. B. Tindale. Very distinct by the form of the hindwings, position of postmedian line, and completely developed ochreous neural streaks on forewings. According to Lower's description the palpi are whitish like the head and thorax.

New South Wales: Broken Hill. South Australia: Pimaroo.



## 74. DICHROMODES AINARIA.

*Dichromodes ainaria* Gn., *Lep.*, ix, p. 321, Pl. 3, f. 5; Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1170.—*Dichromodes divergentaria* Gn., *Lep.*, ix, 321.—*Dichromodes diasemaria* Gn., *ibid.*, p. 321.—*Cidaria metaxanthata* Wlk., *Cat. Brit. Mus.*, xxvi, 1734.—*Dichromodes subflava* Bastelberger, *Berl. Ent. Zeit.*, 1907, 60.

This species is variable, but may be recognized by the dark central band of the forewings in conjunction with the more or less orange hindwings. Certainly *diasemaria*, as Guenée himself suspected, is merely a local varietal form; in many Tasmanian examples the clear orange of the hindwings is replaced by a very dusky tawny-fuscous. The median band of forewings varies much in form; usually its posterior margin presents a prominent acute tooth in middle, especially well-marked in ♀, sometimes it is bifid; in the ♂ this tooth is more rounded, sometimes dentate, sometimes so reduced as to be scarcely perceptible. The underside of the forewings is dusky in the ♂, in the ♀ mostly orange.

New South Wales: Sydney, Katoomba, Bathurst. Victoria: Melbourne, Beaconsfield, Moe, Gisborne, Dunkeld. Tasmania: Hobart, St. Helen's, Zeehan, Strahan. South Australia: Mt. Lofty.

## 75. DICHROMODES SCOTHIMA.

Prout, *Gen. Insect.*, *Oenochrom.*, p. 24.

♂. 26-28 mm. Head blackish. Palpi  $2\frac{1}{2}$ ; blackish, base sharply white. Antennae dark fuscous; pectinations in ♂ 3. Thorax blackish. Abdomen fuscous. Legs fuscous irrorated, and tarsi annulated, with white. Forewings triangular, costa straight except near base and apex, apex pointed, termen slightly rounded, slightly oblique; basal area and median band blackish, the former sometimes very slightly paler, in which case slightly outwardly curved blackish transverse lines at one-fourth and one-third may be perceptible, the latter indicating anterior margin of median band; posterior margin of band from three-fifths costa to three-fourths dorsum, with a slight rounded projection in middle; terminal area very pale fuscous with two, equidistant, wavy, whitish, transverse lines; a fine blackish terminal line thickened into small spots between veins; cilia pale fuscous, apices, and at tornus bases, whitish. Hindwings with termen rounded; orange; a moderate fuscous terminal band; a suffused blackish dorsal streak interrupted three times by whitish near tornus; terminal line as forewings; cilia fuscous. Underside tawny suffused with fuscous especially towards margins; a fuscous discal dot on both wings.

Described from two examples taken by Mr. W. B. Barnard. It is allied to *D. ainaria* but quite distinct. The sharply defined white bases of palpi and blackish basal three-fifths of forewings separate it at once.

Western Australia: Albany, Denmark, in March.

## 76. DICHROMODES LAETABILIS, n. sp.

*laetabilis*, cheerful.

♂, ♀. 30-32 mm. Head dark fuscous. Palpi in ♂ 3, in ♀  $3\frac{1}{2}$ ; dark fuscous, base sharply white. Antennae fuscous; pectinations in ♂  $2\frac{1}{2}$ . Thorax dark fuscous. Abdomen fuscous. Legs dark fuscous. Forewings triangular, costa straight except near base and apex, apex pointed, termen slightly rounded, slightly oblique; rather dark fuscous with darker markings; a line from one-fifth costa to one-third dorsum; sometimes a less distinct parallel line from one-third costa; a median subcostal



discal dot, elongate transversely; a very slender, finely dentate line from two-thirds costa to two-thirds dorsum, nearly straight; usually a similar parallel posterior line; sometimes a fine wavy whitish subterminal line; a fine terminal line dotted between veins; cilia fuscous. Hindwings with termen rounded; orange, brighter in ♀, more tawny in ♂; a moderate fuscous terminal band, narrowly produced along dorsum, in ♂ sometimes suffused; cilia fuscous. Underside of ♂ fuscous with darker discal dots in both wings; in ♀ hindwings similar, but forewings orange except on costal and terminal areas, and without discal dot.

Easily distinguished from *D. ainaria* by the white bases of the palpi and the absence of a median band on forewings.

Type in Coll. Goldfinch.

New South Wales: Katoomba, in October and November. Victoria: Mt. St. Bernard, in January. Five specimens.

#### 77. DICHROMODES HAEMATOPA.

Turn., *Trans. Roy. Soc. S. Aust.*, 1906, 131.

Characterized by the general reddish colouring, white transverse lines and dark fuscous markings of forewings.

Victoria: Sea Lake.

#### 78. DICHROMODES RUFULA.

Prout, *Gen. Insect.*, Oenochrom., p. 26.

♂. 30 mm. Head pale ochreous. Palpi 3; fuscous, upper edge whitish, base sharply white. Antennae fuscous; pectinations 7. Thorax reddish-ochreous. Abdomen whitish-grey. Legs grey irrorated, and tarsi annulated, with whitish; posterior pair almost wholly whitish. Forewings triangular, rather narrow, costa gently arched, apex round-pointed, termen slightly rounded, slightly oblique; whitish suffused with pale reddish-ochreous; a streak of fuscous irroration along costa; transverse lines reddish-ochreous, containing some dark fuscous scales, not reaching costa; three wavy transverse lines are contained in basal area; first line from beneath one-third costa to one-third dorsum, slightly dentate; median band slightly darker, containing a median, subcostal, fuscous, discal dot; postmedian from two-thirds costa to two-thirds dorsum, bent inwards below middle, finely dentate; a slender line runs parallel to this; a broader subterminal line; a wavy fuscous terminal line; cilia whitish with a faint grey median line. Hindwings with termen rounded; pale grey; a faintly darker discal dot; traces of whitish bars on dorsum towards tornus; cilia whitish.

♀. 28 mm. Forewings with basal area uniformly reddish-ochreous; median band more constricted on costa, anterior edge very strongly dentate, purple-reddish, edged posteriorly with whitish; subterminal line purple-reddish, broad, interrupted.

My two examples are very different, but probably the differences are more varietal than sexual.

Western Australia: Cunderdin, in October and November, two specimens taken by Mr. R. Illidge, Geraldton (British Museum type).

#### 79. DICHROMODES AESIA, n. sp.

*αἰσιος*, happy, fortunate.

♂. 30 mm. Head pale ochreous, partly reddish-tinged; face fuscous. Palpi 2½; fuscous, base white, sharply defined. Antennae fuscous; pectinations in ♂ 2½. Thorax fuscous; tegulae and a posterior spot reddish-ochreous. Abdomen grey;



tuft grey-whitish. Legs grey. Forewings triangular, costa nearly straight, apex pointed, termen gently rounded, slightly oblique; pale ochreous, reddish-tinged; a broad fuscous-grey costal and a narrower dorsal streak; a small grey basal area containing a reddish-ochreous spot; a narrow median band grey, traversed by longitudinal, suffused, reddish-ochreous streaks, subcostal, median, and subdorsal, towards edges partly fuscous, broadest beneath costa, constricted above middle, still more constricted above dorsum; its anterior edge very slenderly whitish, slightly toothed beneath costa, thence concave; its posterior edge very slenderly whitish, strongly bisinuate, incurved above and beneath middle; a subterminal fuscous-grey fascia, with subcostal median, and subdorsal reddish-ochreous suffusion, its anterior edge suffused, posterior edge sharply defined, with two small teeth beneath costa, a strong rectangular median projection, thence strongly concave to tornus; a terminal series of confluent triangular fuscous spots; cilia grey irrorated with whitish. Hindwings with termen rounded, grey; cilia grey, apices paler. Underside grey, postmedian area paler; hindwings with a fuscous discal dot before middle.

Nearest *D. ioneura*, but the median band is very differently formed. In that species it has a straight posterior edge.

Western Australia: Tammin, in August (A. J. Nicholson); one specimen in Coll. Goldfinch.

#### 80. DICHROMODES IONEURA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1182.

This varies much in the extent of the coloured markings, which may be crimson or brownish-ochreous.

South Australia: Pimaroo. Western Australia: Perth, Waroona, Cunderdin.

#### 81. DICHROMODES POECILOTTIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1181.—*Dasyuris tridentata* Swin., Trans. Ent. Soc. Lond., 1902, 649.

Victoria: Dimboola, Daytrap near Sea Lake. Western Australia: Perth, Waroona, Kelmscott, Geraldton, Carnarvon.

#### 82. DICHROMODES EUPREPES.

Prout, Gen. Insect., Oenochrom., 1910, p. 26.—*Dichromodes fulvida* Low., PROC. LINN. SOC. N.S.W., 1915, 475.—*Dichromodes cirrhoplaca* Low., *ibid.*, p. 476.

♀. 25-28 mm. Head grey-whitish with a few fuscous scales. Palpi  $3\frac{1}{2}$ ; fuscous, upper surface mixed with grey-whitish, base sharply white. Antennae fuscous. Thorax whitish-ochreous mixed with fuscous. Abdomen whitish mixed with fuscous or grey. Legs fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa straight to near apex, apex obtusely pointed, termen slightly rounded, slightly oblique; grey-whitish or whitish-ochreous; broadly suffused with grey along costa; a subdorsal, fuscous, basal spot; first line dark fuscous, narrow, straight, from one-fourth dorsum, obliquely outwards to beneath one-third costa, sometimes ill-defined or interrupted, edged broadly with brownish-ochreous anteriorly and with whitish posteriorly; a transversely-oval, dark fuscous, pale-centred, median, subcostal, discal spot; sometimes a median and a dorsal fuscous bar across median band; postmedian line dark fuscous, slender, from two-thirds dorsum obliquely outwards to beneath three-fourths costa, sometimes ill-defined, anteriorly narrowly edged with whitish, posteriorly broadly edged with



brownish-ochreous; a subterminal fuscous line immediately follows, thickened quadrangularly beneath costa, in middle, and on dorsum; a crenulate fuscous terminal line, sometimes reduced to dots; cilia grey-whitish sometimes mixed with fuscous. Hindwings with termen rounded, grey; cilia grey.

Allied to *D. poecilotis*, *ioneura*, and *orthozona*. Distinguished by the outwardly oblique lines of forewing not reaching costa.

Victoria: Dimboola. South Australia: Pimaroo. Western Australia: Waroona, Cunderdin, Coolgardie.

#### 83. DICHROMODES COMPSOTIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1174.

I do not know this species, which appears to belong to the *ioneura* group, and to be different from any I have seen. Mr. L. B. Prout kindly examined Meyrick's type for me.

Western Australia: Perth.

#### 84. DICHROMODES ORTHOTIS.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1180.

Western Australia: Perth, Waroona, Collie, Albany, Denmark.

#### 85. DICHROMODES ORTHOZONA.

Low., Trans. Roy. Soc. S. Aust., 1903, 189.

♂, ♀. 25-30 mm. Head grey-whitish with some fuscous scales. Palpi 3; dark-fuscous, upper surface partly grey-whitish, base sharply white. Antennae fuscous; pectinations in ♂ 5. Thorax and abdomen grey-whitish mixed with dark fuscous. Legs dark fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa straight except near base and apex, apex obtusely pointed, termen slightly bowed, slightly oblique; dark fuscous mixed with grey-whitish; a short dark fuscous or ferruginous bar from costa near base, not reaching dorsum; first line nearly straight, ochreous-whitish, from one-fourth costa to one-third dorsum, edged anteriorly with dark ferruginous-fuscous, posteriorly by a narrow blackish line with small dentations beneath costa, in middle, and above dorsum; a transversely oval, dark fuscous, more or less pale-centred, median, subcostal, discal spot; median area crossed by fine blackish streaks; postmedian line from three-fourths costa to two-thirds dorsum, very slightly curved outwards, ochreous-whitish, anteriorly narrowly edged with blackish, posteriorly with dark ferruginous-fuscous; a fine, whitish, irregular, subterminal line with quadrangular projections above and below middle; a terminal series of blackish dots; veins in costal and terminal areas more or less outlined by fine brownish-ochreous streaks; cilia whitish barred with fuscous. Hindwings with termen rounded; grey; a darker discal dot; terminal dots and cilia as forewings.

Readily distinguished from *D. euprepes* by the lines of forewings converging towards dorsum, whereas in that species they are parallel and strongly outwardly oblique from dorsum.

Western Australia: Perth. North-west Australia: Roeburne.

#### 86. DICHROMODES PARTITARIA.

*Eubolia partitaria* Wlk., Cat. Brit. Mus., xxxv, 1699.—*Dichromodes partitaria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1175.



Mr. Prout suggests that Walker's type may be the same as *D. sigmata* Wlk. The species described by Meyrick, of which I have seen a small series, is very distinct from that species.

Victoria: Dimboola. Western Australia: Perth, Albany, Northampton.

#### 87. DICHROMODES ANGASI.

*Liodes ? angasi* Feld., *Reise Novara*, Pl. 131, f. 13.

♂. 25 mm. Head fuscous irrorated with whitish; face dark fuscous. Palpi 2; dark fuscous, base sharply white. Antennae fuscous; pectinations in ♂ 3. Thorax fuscous irrorated with whitish. Abdomen whitish irrorated with fuscous. Legs fuscous; tarsi annulated with whitish; posterior tibiae whitish with some fuscous irroration. Forewings triangular, costa very slightly arched, apex round-pointed, termen slightly bowed, slightly oblique; fuscous with some whitish irroration; a slender, curved, transverse, fuscous line at one-fifth faintly indicated; first line obsolete; discal dot scarcely indicated; postmedian line fuscous, sinuate, very indistinct; a conspicuous grey-whitish terminal band, its anterior edge sharply defined, very irregular, from costa near apex, at first dentate, deeply excavated above and below middle, median projection irregularly quadrangular, ending at tornus; a fine, interrupted, dark fuscous, terminal line; cilia pale grey, on costa darker. Hindwings with termen rounded; grey; a darker terminal line; cilia pale grey.

Allied to *D. partitaria* but considerably larger, the forewings without white lines, the antennal pectinations considerably longer (barely 2 in *partitaria*). My example closely resembles Felder's figure.

Victoria: Sea Lake in March; one specimen received from Mr. D. Goudie.

#### 88. DICHROMODES PHAEOSTROPHA.

*Dichromodes obtusata* var. *longidens* Prout, *Gen. Insect.*, Oenochrom., p. 24.—*Dichromodes phaeostropha* Turn., *Proc. Roy. Soc. Tas.*, 1925, 108.

A good and distinct species, not very closely related to *D. obtusata*. Varietal names have, I believe, no priority. I might have adopted Prout's name had I known of it when publishing my description.

Victoria: Frankston near Melbourne, Beaconsfield. Tasmania: Launceston, Zeehan, Strahan. South Australia: Mt. Lofty.

#### 89. DICHROMODES ANELICTIS.

Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1172.

♂. 24-30 mm. ♀. 22-29 mm. Excessively variable; not only may the median band be interrupted above dorsum, but the whole of it between dorsum and angle may be obliterated by whitish or fuscous suffusion; part of it may be blackish between angle and costa; but the very acute posterior angle makes the species always easy to recognize. Rarely there is some ferruginous suffusion in terminal area. The palpi also, in addition to the white area at base and the upper margin, may be mixed throughout with white scales. All these varieties may occur in the same locality.

Victoria: Dimboola, Walpeup, Sea Lake. South Australia: Adelaide, Mt. Lofty. Western Australia: Perth, Waroona, Kelmscott, Albany, Geraldton.



90. *DICHROMODES ORIPHOETES*, n. sp.

*ὄρειφοῦτης*, mountain-ranging.

♂, ♀. 30-34 mm. Head and thorax dark fuscous irrorated with whitish. Palpi in ♂  $2\frac{1}{2}$ , in ♀ 3; dark fuscous, a few whitish scales on upper surface, base sharply white. Antennae fuscous; pectinations in ♂ 5. Abdomen ochreous-whitish partly suffused with grey. Legs fuscous irrorated with whitish. Forewings triangular, costa gently arched, apex round-pointed, termen slightly rounded, scarcely oblique; fuscous irrorated with white; a suffused fuscous spot on base of costa and another on dorsum near base; a suffused and interrupted fuscous transverse line slightly beyond; first line from one-third costa to one-third dorsum, white, edged with blackish posteriorly, slightly dentate, slightly outwardly curved; a transverse, median, subcostal, blackish, discal mark; postmedian line from two-thirds costa to two-thirds dorsum, white, edged anteriorly with blackish, indented above and below middle, with a rather obtuse median angle; an irregular white subterminal line, dentate, somewhat projecting in middle; an interrupted blackish terminal line preceded by a grey-whitish line; cilia fuscous, apices barred with white. Hindwings with termen rounded; pale grey suffused with yellowish towards base in ♂, in ♀ almost wholly and more distinctly yellowish; in ♂ two indistinct pale subterminal lines, and a faintly darker discal dot; terminal line and cilia as forewings.

New South Wales: Mt. Kosciusko (5,000 feet) in December; eight specimens received from Mr. G. M. Goldfinch, who has the type.

91. *DICHROMODES DENTICULATA*, n. sp.

*denticulatus*, finely toothed.

♂. 22 mm. Head and thorax dark fuscous mixed with grey. Palpi 2; dark fuscous, base sharply white. Antennae fuscous; pectinations in ♂ 2. Abdomen fuscous. Legs: anterior pair dark fuscous, tibiae and tarsi annulated with whitish (others missing). Forewings triangular, costa slightly arched, apex round-pointed, termen slightly rounded, slightly oblique; grey irrorated with fuscous; lines dark fuscous; a transverse sub-basal line succeeded by two fine dentate lines; ante-median from a spot on two-fifths costa to two-fifths dorsum, slightly outwardly-curved, dentate; postmedian from a spot on three-fifths costa to three-fifths dorsum, sharply dentate, bent inwards below middle; median band narrow, especially in dorsal half, darker than disc, containing a median, subcostal, dark-fuscous transverse, discal mark; a fine, strongly waved, slightly dentate line from a spot on four-fifths costa to four-fifths dorsum; a very slender, wavy, whitish, subterminal line; a terminal series of triangular blackish dots; cilia grey-whitish mixed with fuscous. Hindwings with termen rounded; grey; cilia grey.

Allied to *D. disputata*, but the shorter palpi and antennal pectinations are sufficient to prove it distinct.

Western Australia: Perth; one specimen received from Mr. L. J. Newman.

92. *DICHROMODES DISPUTATA*.

*Panagra disputata* Wlk., *Cat. Brit. Mus.*, xxiii, 1009.—*Panagra dentigeraria* Wlk., *ibid.*, xxvi, 1665.—*Dichromodes odontias* Meyr., *Proc. Linn. Soc. N.S.W.*, 1889, 1173.—*Dichromodes disputata* Meyr., *ibid.*, 1173.—*Dichromodes mesozona* Prout, *Gen. Insect.*, *Oenochrom.*, p. 27.



Palpi 2½. Antennal pectinations 4. Very variable; in some examples the whole of the forewings is suffused with reddish scales, in others these are reduced to a few scattered scales in disc and cilia, in others they are completely absent. The head may be dark fuscous or reddish. There is an example from the Grampians in the National Museum, Melbourne, closely agreeing with the description of *odontias*. *D. mesozona* is probably to be referred here.

Queensland: Maryborough, Caloundra, Stradbroke Is., Stanthorpe. New South Wales: Glen Innes, Sydney, Katoomba, Orange. Victoria: Beechworth, Grampians, Dimboola.

#### 93. DICHROMODES PARATACTA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1176.

Palpi 2; fuscous more or less mixed with pale ochreous, towards base whitish, but without sharply defined white area. Abdomen fuscous more or less mixed with whitish.

Queensland: Caloundra, Brisbane, Stradbroke Is., Coolangatta. New South Wales: Sydney.

#### 94. DICHROMODES ARISTADELPHA.

Low., *Trans. Roy. Soc. S. Aust.*, 1903, 190.

♂. 24-28 mm. ♀. 24-25 mm. Head pale grey with a few fuscous scales. Palpi 2½; fuscous, upper surface irrorated with whitish, base sharply white. Antennae fuscous; pectinations in ♂ 2½. Thorax pale grey mixed with blackish. Abdomen fuscous, some irroration, apices of segments, and tuft ochreous-whitish. Legs fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa straight, except near base and apex, apex obtusely pointed, termen slightly rounded, slightly oblique; pale brownish-ochreous more or less suffused with fuscous; a transverse dark fuscous mark on costa near base; sometimes a roundish dark fuscous suffusion on dorsum near base; first line from one-third costa to beyond one-third dorsum, slender, ochreous-whitish, outwardly-curved but indented above dorsum, edged anteriorly by a fuscous line; postmedian line from two-thirds costa to three-fourths dorsum, slender, ochreous-whitish, outwardly-curved but more or less indented beneath costa and above dorsum; between these lines is a dark fuscous, partly blackish, median band, containing a narrow, blackish, median, subcostal, discal mark; beyond postmedian line is a brownish-ochreous suffused band; subterminal line whitish, slender, strongly indented above and below middle, edged anteriorly by a dark fuscous or blackish suffusion, posteriorly by a fine fuscous line; terminal area grey-whitish; a fine, blackish, crenulate, terminal line; cilia whitish obscurely barred with fuscous. Hindwings with termen rounded; pale fuscous; a darker discal dot; a finely dentate, darker, postmedian line edged obscurely with whitish posteriorly; sometimes a similar but not dentate subterminal line; cilia fuscous, apices paler.

South Australia: Adelaide in September (Lower's type). Western Australia: Busselton in February, three specimens (W. B. Barnard).

#### 95. DICHROMODES DIFFUSARIA.

*Panagra diffusaria* Gn., *Lep.*, x, 132.—*Dichromodes strophiodes* Low., *Trans. Roy. Soc. S. Aust.*, 1893, 155.



♂, ♀. 25-28 mm. Head and thorax fuscous with more or less whitish irroration. Palpi in ♂  $2\frac{1}{2}$ , in ♀  $3\frac{1}{2}$ ; dark fuscous, upper surface irrorated with grey-whitish, base sharply white. Antennae fuscous; pectinations in ♂ 4. Abdomen fuscous with some whitish irroration; apices of segments whitish. Legs fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa gently arched, apex obtusely pointed, termen slightly rounded, slightly oblique; fuscous with some whitish irroration; an erect transverse bar from dorsum near base, ending in an acute point beneath costa, dark fuscous; a narrow fuscous transverse line, sometimes reduced to dots, follows this; first line whitish, suffused, nearly straight, from one-fourth costa to one-third dorsum; median band darker, containing a median, subcostal, dark fuscous, discal dot; postmedian line whitish, suffused, sinuate beneath costa, with an acute, projecting, median angle, thence strongly inwardly-curved, from three-fourths costa to three-fourths dorsum; a fine fuscous line follows this; a wavy, whitish, subterminal line, more or less marked, edged anteriorly and sometimes interrupted by dark fuscous; a wavy, blackish terminal line; in some examples there are additional brownish-ochreous markings, most commonly a suffused median spot posterior to postmedian line, sometimes also a longitudinal streak posterior to that line midway between costa and middle, sometimes some suffusion near base and on first line; cilia fuscous barred with whitish. Hindwings with termen rounded; grey; two or three whitish bars on dorsum above tornus, sometimes prolonged into disc; a darker terminal line; cilia grey, bases and apices partly whitish.

The coloured markings are inconstant and often wholly absent, in which case the species has a general resemblance to *D. triparata*, but may be at once distinguished by the white bases of the palpi.

Queensland: Coolangatta. New South Wales: National Park, Katoomba. Victoria: Melbourne, Sale, Grampians. South Australia: Adelaide, Mt. Lofty. Western Australia: Perth, Waroona.

#### 96. DICHROMODES MESOGONIA.

Prout, *Gen. Insect.*, *Oenochrom.*, p. 27.

♂. 24 mm. Head and thorax fuscous with slight whitish irroration. Palpi  $2\frac{1}{4}$ ; fuscous, upper surface irrorated with whitish, base sharply white. Antennae grey; pectinations in ♂ 3. (Abdomen broken off.) Legs fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa gently arched, apex round-pointed, termen slightly rounded, moderately oblique; fuscous irrorated with whitish, median band darker; antemedian line obscure, whitish, nearly straight, edged anteriorly and posteriorly with fuscous, from one-third costa to two-fifths dorsum; an obscure, fuscous, median, subcostal, discal dot; postmedian line slender, whitish, edged anteriorly with fuscous, from two-thirds costa to three-fifths dorsum, slightly angled outwards beneath costa, and again more distinctly in middle; an obscure ferruginous spot on angle of this line; an obscure, whitish, wavy, subterminal line; a fine, interrupted, dark fuscous, terminal line; cilia fuscous with obscure, whitish, basal bars, apices grey mixed with whitish. Hindwings with termen rounded; grey; cilia grey, apices paler.

Redescribed from the type in the National Museum, Melbourne. Probably nearest *D. diffusaria*, but more closely resembling some forms of *D. triparata*, from which it may be distinguished by the palpi being white at base.

Victoria: Sea Lake.



97. *DICHROMODES EMPLECTA*, n. sp.

ἐμπλεκτός, interwoven.

♂, ♀. 25-30 mm. Head dark-fuscous. Palpi 2½; dark-fuscous, some whitish irroration on upper surface; base sharply white. Antennae fuscous; pectinations in ♂ 3. Thorax fuscous with a few whitish scales. Abdomen fuscous irrorated with whitish; tuft greyish-ochreous. Legs fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa straight except near base and apex, apex obtusely pointed, termen slightly rounded, slightly oblique; brownish-fuscous suffused and irrorated with whitish and blackish; a narrow basal dark fuscous fascia; a brown-whitish sub-basal fascia containing some fuscous irroration especially on costa; a brownish-fuscous transverse line, becoming blackish on costa and dorsum, succeeds this; first line from one-third costa to two-fifths dorsum, slender, blackish, strongly but irregularly dentate; a median, subcostal, blackish, sometimes pale-centred, transverse, discal mark; second line from three-fourths costa to two-thirds dorsum, slender, blackish, finely dentate, not angled, its costal half, where it traverses a white suffusion, more or less obsolete; median band more or less filled in with blackish; a wavy brownish-fuscous line from four-fifths costa to four-fifths dorsum; an irregular whitish subterminal line edged anteriorly with blackish, more thickly beneath costa, in middle, and above dorsum; a fine, crenulate, blackish, terminal line; cilia fuscous mixed, and apices barred, with whitish. Hindwings with termen rounded; fuscous; some whitish irroration and two or three blackish bars on dorsum; a darker terminal line; cilia fuscous, apices whitish.

Western Australia: Albany and Denmark in February and March; twelve specimens received from Mr. W. B. Barnard, who has the type.

98. *DICHROMODES CONFLUARIA*.

*Panagra confluaria* Gn., *Lep.*, x, p. 131, Pl. 7, f. 8.—*Dichromodes confluaria* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1193.

New South Wales: Jervis Bay, Katoomba. Victoria: Melbourne, Beaconsfield, Moe, Gisborne, Dunkeld. Tasmania: Hobart, St. Helen's, Launceston, Deloraine, Zeehan. Western Australia: Perth, Waroona, Albany.

99. *DICHROMODES ROSTRATA*, n. sp.

*rostratus*, having a beak.

♀. 35 mm. Head and thorax whitish mixed with fuscous. Palpi extremely long (8); fuscous, upper surface irrorated with whitish, base sharply white. Antennae grey. Abdomen whitish mixed with fuscous and ferruginous. Legs whitish irrorated with fuscous. Forewings triangular, costa nearly straight, slightly sinuate, apex pointed, termen nearly straight, oblique; grey-whitish irrorated and partly suffused with dark-fuscous; a broad grey-whitish streak along costa from base to apex, giving off from near base a finger-shaped process with rounded extremity reaching to two-fifths of disc midway between costa and dorsum; a similar streak on dorsum from base to tornus becoming narrower posteriorly; a white straight line from beneath five-sixths costa to above three-fifths dorsum, preceded by a dark fuscous mark beneath costa, and a large dark fuscous suffusion which extends basally on both sides of the finger-shaped process; a blackish, subcostal, discal dot beyond middle; a fine, whitish, subterminal line commencing near apex, outwardly toothed in middle, and forming a second tooth.



on apex, anterior margin shaded, and teeth filled in with dark fuscous; a dark fuscous, terminal line edged anteriorly by a white line; cilia fuscous, bases and apices whitish. Hindwings with termen only slightly rounded; grey; a darker discal dot and terminal line; cilia grey, apices whitish.

This very distinct species, remarkable for its long palpi, is nearest *D. confluaria*.

Western Australia: Merredin, one specimen received from Mr. L. J. Newman.

#### 100. DICHROMODES EXPLANATA.

*Panagra explanata* Wlk., *Cat. Brit. Mus.*, xxiii, 1009.—*Dichromodes explanata* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1179.

New South Wales: Sydney, Bathurst. Victoria: Melbourne, Sale, Bendigo, Grampians. South Australia: Mt. Lofty. Western Australia: Albany.

#### 101. DICHROMODES OBTUSATA.

*Panagra obtusata* Wlk., *Cat. Brit. Mus.*, xxiii, 1008.—*Panagra devitata* Wlk., *ibid.*, 1010.—*Dichromodes obtusata* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1177.

Palpi in ♂ 2½, in ♀ 3. Two males from Western Australia have palpi 2, and sub-basal line of forewings more fuscous than ferruginous, but they are not separable specifically.

Queensland: Stradbroke Is., Coolangatta. New South Wales: Sydney, Jervis Bay, Katoomba, Bathurst, Mittagong. Victoria: Melbourne, Beaconsfield, Sale, Gisborne. South Australia: Adelaide, Mt. Lofty. Western Australia: Bridgetown, Cunderdin.

#### 102. DICHROMODES LISSOPHRICA, n. sp.

λίσσοφρικος, smoothly rippled.

♂. 28 mm. Head grey. Palpi 2; fuscous, base sharply white. Thorax and abdomen grey. Legs fuscous (posterior pair missing). Forewings triangular, costa slightly arched, apex obtusely pointed, termen slightly rounded, slightly oblique; pale grey, markings fuscous; costal edge fuscous to two-thirds; a fuscous bar from base of costa half-way across disc; antemedian from one-third costa to two-fifths dorsum, sharply angled in disc first outwards, then inwards, then again outwards, closely preceded by a similar parallel line; a subcostal, fuscous, discal dot well beyond middle; postmedian from two-thirds costa to three-fourths dorsum, slightly sinuate, sharply dentate, with two larger posterior teeth below middle; two faint indistinct dentate lines beyond this; cilia grey. Hindwings with termen only slightly rounded; whitish-grey; cilia whitish-grey.

Western Australia: Perth in October; one specimen received from Mr. J. Clark.

#### 103. DICHROMODES EXSIGNATA.

*Panagra exsignata* Wlk., *Cat. Brit. Mus.*, xxiii, 1010 (*nec* Meyr.).—*Dichromodes diasemaria* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1171; Turn., *Proc. Roy. Soc. Tas.*, 1925, 107 (*nec* Gn.).—*Dichromodes uniformis* Bastelberger, *Berl. Ent. Zeit.*, 1907, 60.—*Dichromodes exocha* Prout, *Novit. Zool.*, 1916, 1.

Meyrick and myself have wrongly attributed the name *diasemaria* to this species. Meyrick's description applied to the ♀ only; I have myself described both sexes from Tasmanian examples. A ♂ from Sydney has the markings better



defined than in Tasmanian specimens of this sex, and the median band is distinctly darker. A ♂ from Katoomba resembles the ♀ in having the first and postmedian line followed by a pale shade. In both the hindwings are dark grey without any brownish tinge. In some aberrant examples the median band is darker than basal and terminal areas; this should be noted as an exception in my key.

New South Wales: Sydney, Katoomba. Tasmania: St. Helen's, Beaconsfield, Cradle Mt. (3,000 feet), Zeehan, Strahan.

Prout's type (A. Simmons) is from Kelso near Beaconsfield, Tasmania, not from New South Wales.

#### 104. *DICHROMODES ORECTIS*.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1183.

♂, ♀. 20-22 mm. Head whitish-grey. Palpi  $2\frac{1}{2}$ ; fuscous, upper surface whitish-grey, base sharply white. Antennae grey; pectinations in ♂  $3\frac{1}{2}$ . Thorax whitish-grey. Abdomen whitish-grey, with a few fuscous scales. Legs fuscous; in posterior pair mixed with whitish. Forewings triangular, costa straight except near base and apex, apex round-pointed, termen slightly bowed, slightly oblique; whitish-grey, markings and some irroration dark fuscous; a short transverse mark from base of costa; first line from one-third costa to one-third dorsum, slightly wavy, sometimes preceded by a parallel line, sometimes thickened and blackish except towards costa; a median, subcostal, round, pale-centred, discal spot; postmedian line from two-thirds costa or slightly beyond to two-thirds dorsum, sinuate to middle, where it forms an acute angle and is bent and curved inwards, sometimes thickened and blackish except towards costa, sometimes interrupted into a series of dots, sometimes a ferruginous-ochreous spot at angle; sometimes a fuscous parallel line follows this; subterminal very obscure, whitish, anteriorly more or less suffused with fuscous; a terminal series of blackish dots; cilia grey, apices paler. Hindwings with termen rounded; grey; cilia as forewings.

At first sight the different forms of this species may be puzzling, but the variation is analogous to that in *atrosignata*.

Western Australia: Albany and Busselton in February; four specimens received from Mr. W. B. Barnard; Geraldton in November and December.

#### 105. *DICHROMODES SEMICANESCENS*.

Prout, *Novit. Zool.*, 1913, 388.

♀. 18 mm. Head fuscous irrorated with grey. Palpi fuscous, base whitish. Thorax and abdomen grey. Forewings rather broadly triangular, apex round-pointed, termen rounded, slightly oblique; grey; dorsal area, except base, irrorated with dark fuscous; costal area suffused with pale ferruginous-ochreous; several areas of longitudinal ferruginous-ochreous suffusion in terminal area; a dark fuscous terminal band narrowing to a point at tornus; antemedian line slender, indistinct, dark fuscous, arising from a blackish spot on costa at one-fourth; similar costal spots shortly before and after middle; discal spot blackish, followed by some fuscous suffusion; postmedian line scarcely traceable. Hindwings fuscous; dorsal margin slightly paler with indications of commencing fuscous transverse line.

I do not know this species, and have abstracted these details from Prout's description.

Western Australia: Geraldton.



106. *DICHROMODES SIGMATA*.

*Panagra sigmata* Wlk., *Cat. Brit. Mus.*, xxiii, 1005.—*Dichromodes sigmata* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1179.

♂. 24 mm. Head and thorax fuscous irrorated with whitish. Palpi  $3\frac{1}{2}$ ; dark fuscous, upper surface irrorated with grey-whitish, base sharply white. Antennae grey; pectinations in ♂ 3. Legs fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa gently arched, apex obtusely pointed, termen slightly rounded, moderately oblique; fuscous, rather densely irrorated with whitish; first line from one-fourth costa to one-third dorsum, at first outwardly oblique, bent beneath costa, thence straight, white edged posteriorly with blackish, which is thickened in middle and above dorsum; a median, subcostal, dark fuscous, discal dot; postmedian line from two-thirds costa to two-thirds dorsum, unevenly edged anteriorly with blackish, which is thickened beneath costa, in middle, and above dorsum, at first sinuate and transverse, slightly angled outwards in middle, thence incurved; angle of postmedian line edged posteriorly with brownish-ochreous; a short longitudinal streak of the same colour posterior to this line midway between costa and middle; a suffused whitish terminal band; a wavy blackish terminal line; grey obscurely barred with whitish. Hindwings with termen rounded; grey; cilia grey.

Queensland: Stanthorpe; one example in February. New South Wales: Sydney (British Museum type).

107. *DICHROMODES LYGRODES*, n. sp.

λυγρωδης, gloomy.

♀. 28 mm. Head and thorax dark fuscous with some whitish irroration. Palpi 3; dark fuscous, upper edge irrorated with grey-whitish, lower edge slenderly grey-whitish towards base. Antennae grey-whitish annulated with blackish. Abdomen grey irrorated with fuscous. Legs dark fuscous irrorated, and tarsi annulated, with whitish; posterior pair mostly whitish. Forewings triangular, costa slightly arched, apex round-pointed, termen slightly rounded, slightly oblique; dark fuscous irrorated with ochreous-whitish; antemedian line represented by two or three ochreous-whitish dots; a median, subcostal, transverse, blackish, discal mark; postmedian line formed by a very distinct series of ochreous-whitish dots, from two-thirds costa to two-thirds dorsum, with a slight posterior prominence below costa and a distinct posterior angle below middle, concave above and below angle; an ochreous-whitish wavy subterminal line partially developed; a fine, blackish, crenulate, terminal line; cilia fuscous, apices mostly ochreous-whitish. Hindwings with termen slightly rounded; pale grey; indistinct whitish anteriorly, fuscous-edged postmedian and subterminal lines; cilia grey, apices grey-whitish.

South Australia: Pimaroo; one specimen in Coll. Lower, now in South Australian Museum.

108. *DICHROMODES LIOSPODA*.

Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1178. I have not seen this species. New South Wales: Sydney.

109. *DICHROMODES LEPTOGRAMMA*, n. sp.

λεπτογραμμας, faintly marked.

♀. 22 mm. Head and thorax grey-whitish irrorated with fuscous. Palpi  $2\frac{1}{4}$ ;



fuscous, upper surface irrorated with whitish, base sharply white. Antennae grey-whitish, towards apex dark grey, towards base annulated with dark fuscous. Abdomen grey. Legs fuscous; posterior pair grey-whitish irrorated with fuscous. Forewings triangular, costa nearly straight, arched towards apex, apex round-pointed, termen slightly rounded, slightly oblique; grey-whitish irrorated with dark fuscous; lines slender, grey-whitish, indistinct; antemedian from one-third costa to two-fifths dorsum, nearly straight; postmedian from two-thirds costa to four-fifths dorsum, slightly waved; discal dot obsolete; cilia grey-whitish with a fuscous median line. Hindwings with termen rounded; grey; cilia grey.

Very obscure, the markings being scarcely perceptible. It is probable that they are more distinct in some examples.

Western Australia: Perth in October; one specimen received from Mr. J. Clark.

#### 110. *DICHROMODES LIMOSA*, n. sp.

*limosus*, muddy.

♂, ♀. 23-26 mm. Head and thorax whitish-grey. Palpi 3; pale fuscous, upper edge whitish, base narrowly white. Antennae grey-whitish; pectinations in ♂ 7. Abdomen and legs ochreous-grey-whitish. Forewings triangular, costa gently arched, apex acute, termen slightly rounded, slightly oblique; ochreous-grey-whitish with some fine fuscous irroration; costal edge more or less ochreous-tinged; first line very slender, pale, sometimes indistinct, from two-fifths costa to two-fifths dorsum, usually edged posteriorly by minute subcostal, median, and subdorsal fuscous dots; a median, subcostal, fuscous, discal dot; postmedian line very slender, pale, sometimes indistinct, from four-fifths costa to three-fifths dorsum, slightly outwardly-curved beneath costa, thence nearly straight or slightly wavy, usually edged anteriorly by a series of fuscous dots; sometimes whole of median band, except towards costa, is suffused with fuscous; a fine, pale, dentate or wavy, subterminal line; an interrupted blackish terminal line; cilia grey, apices more or less ochreous-whitish. Hindwings with termen rounded; pale grey; sometimes indications of a fine, pale, transverse, median line; cilia as forewings.

Variable in the presence or absence of a dark median band. The more obscure examples might be confused with *D. ornata*, but the white base of palpi, slight ochreous tinge, and dorsal termination of first line much nearer to postmedian line than to base, are sufficient distinctions.

North Queensland: Cape York. Queensland: Yeppoon in October; Rockhampton in July; Emerald in September; Bundaberg in June; Brisbane in September and March; Warra near Dalby. New South Wales: Lismore in October. Ten specimens.

#### 111. *DICHROMODES LEPTOZONA*, n. sp.

*λεπτοζωνος*, with slender girdle.

♂, ♀. 20-23 mm. Head and thorax grey irrorated with whitish. Palpi 2½; grey, upper surface whitish, base white. Antennae pale grey; pectinations in ♂ 5. Abdomen ochreous-grey-whitish. Legs grey; posterior pair whitish; posterior tibiae of ♂ strongly dilated and grooved in distal three-fourths. Forewings triangular, costa straight to near apex, apex pointed, termen slightly rounded, slightly oblique; grey with dense whitish irroration; a slender grey median band,



sometimes blackish towards dorsum, containing a minute blackish discal dot, strongly expanded on costa, less so on dorsum, constricted in middle, anterior edge from two-fifths costa to two-fifths dorsum, outwardly curved, posterior edge from four-fifths costa to three-fifths dorsum, nearly straight or slightly waved; terminal area grey traversed by a slender whitish subterminal line; an interrupted blackish terminal line; cilia grey with whitish points, apices grey. Hindwings with termen rounded; grey; sometimes a faintly darker transverse line from dorsum succeeded by a paler tornal area; a darker terminal line; cilia grey. Underside of hindwings whitish irrorated with grey, with grey discal dot and postmedian line.

Western Australia: Kalamunda near Perth in December, ♂ type in Coll. Barnard; in September, ♀ in Coll. Goldfinch.

#### 112. DICHROMODES PERSONALIS.

*Colobochila ? personalis* Feld., *Reise Novara*, Pl. 120, f. 20.—*Dichromodes personalis* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1194—*Epidesmia ophiosema* Low., *Trans. Roy. Soc. S. Aust.*, 1901, 64.

I have seen Lower's type and can confirm Prout's identification. The species is very distinct and cannot be mistaken. Although the internal groove and tuft of the posterior ♂ tibiae are well marked, the tibiae are only slightly dilated.

Western Australia: Perth, Waroona, Merredin, Mt. Barker, Albany.

#### 113. DICHROMODES OPHIUCHA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1186.

The absence of both transverse lines makes this species easily recognizable.

Queensland: Toowoomba (W. B. Barnard). New South Wales: Sydney, National Park.

#### 114. DICHROMODES EUSCIA.

Meyr., PROC. LINN. SOC. N.S.W., 1889, 1185.

Distinguished by the absence of the antemedian line.

New South Wales: Katoomba. Tasmania: Zeehan, Strahan.

#### 115. DICHROMODES INDICATARIA.

*Eubolia indicataria* Wlk., *Cat. Brit. Mus.*, xxxv, 1698.—*Dichromodes indicataria* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1186.

Variable, but distinguished by the wholly fuscous palpi (except upper edge), combined with the finely dentate postmedian line.

Queensland: Caloundra, Stradbroke Is., Southport, Coolangatta. New South Wales: Sydney, Jervis Bay. Victoria: Melbourne, Beaconsfield, Grampians. Western Australia: Perth, Kelmscott, Waroona, Bunbury, Geraldton.

#### 116. DICHROMODES ICELODES, n. sp.

είκελωδης, similar.

♂. 22 mm. Head grey with whitish points. Palpi 4; fuscous; upper surface grey with whitish points. Antennae fuscous; pectinations in ♂ 3. Thorax grey. Abdomen pale grey. Legs fuscous; posterior pair grey. Forewings triangular, costa straight except near base and apex, apex pointed, termen slightly bowed, scarcely oblique; grey with fine whitish irroration; markings fuscous; antemedian line from one-third costa to two-fifths dorsum, slender, slightly dentate;



discal spot annular, rather large, in centre grey; postmedian from before two-thirds costa to mid-dorsum, finely dentate, slender; subterminal line well marked, slightly wavy; a fine interrupted terminal line; cilia grey with whitish points on basal half. Hindwings with termen gently rounded; grey; a darker discal dot before middle; slight indications towards dorsum of a paler subterminal line; cilia grey.

♀. 20 mm. Palpi 5. Forewings with markings broader, blackish, very distinct; discal spot fused with postmedian line; cilia with indistinct fuscous bars.

Very near *D. indicataria*, but may be distinguished by the longer palpi.

New South Wales: Mt. Kosciusko (5,000 feet) in November, two specimens in Coll. Goldfinch.

#### 117. *DICHROMODES RAYNORI*.

Prout, in Seitz, *Indo-Aust. Geometridae*, p. 9.

♂, ♀. 20-24 mm. Head grey. Palpi in ♂ 4, in ♀ 5 to 6; fuscous, some whitish irroration on upper surface. Antennae grey; pectinations in ♂ 8. Thorax grey. Abdomen grey irrorated with ochreous-whitish. Legs fuscous; posterior pair whitish with a few fuscous scales. Forewings triangular, costa slightly arched, apex obtusely pointed, termen nearly straight, slightly oblique; pale grey; first line from one-third costa to one-third dorsum, broad, straight, blackish, partly or wholly obsolete towards costa; a median, subcostal, faintly marked, pale-centred, discal spot; postmedian line from two-thirds costa to two-thirds dorsum, broad, blackish, angled in middle, curved inwards beneath angle, partly or wholly obsolete above angle, posteriorly edged by a whitish line; a very faint, crenulate, pale, subterminal line, with dark anterior edge; a terminal series of blackish dots; cilia grey, apices paler. Hindwings with termen only slightly rounded; grey; traces of darker postmedian and terminal lines; cilia as forewings.

The sexes are nearly similar. Very like the ♀ of *D. atosignata*, but the palpi are much longer. In the latter species the discal dot of forewing is smaller, darker, and very rarely pale-centred.

Queensland: Stradbroke Island in August, September, and January; seven specimens. New South Wales: Sydney.

#### 118. *DICHROMODES ATROSIGNATA*.

*Panagra atosignata* Wlk., *Cat. Brit. Mus.*, xxiii, 1006.—*Eubolia linda* Butl., *Ann. Mag. Nat. Hist.* (5), ix, 1882, 96.—*Dichromodes atosignata* Meyr., *Proc. LINN. Soc. N.S.W.*, 1889, 1184.

♂. 26-34 mm. ♀. 25-29 mm. Palpi in ♂  $2\frac{1}{2}$  to 3, in ♀ 3 to  $3\frac{1}{2}$ . Antennal pectinations in ♂ 4. The ♂ is variable in colour and in the degree of angulation of postmedian line of forewings. The ♀ is more constant, but strikingly different in the broad blackish suffusions edging the antemedian and postmedian lines towards dorsum, and in it the angle of the latter is always acute.

Queensland: Caloundra, Coolangatta, Toowoomba. New South Wales: Sydney, Jervis Bay. Victoria: Melbourne, Beaconsfield, Sale, Dimboola. South Australia: Mt. Lofty.

#### 119. *DICHROMODES TRIPARATA*.

*Panagra molybdaria* Wlk., *Cat. Brit. Mus.*, xxiii, 995 (*nec* Gn.).—*Panagra triparata* Wlk., *ibid.*, 1005.—*Dichromodes triparata* Meyr., *Proc. LINN. Soc. N.S.W.*, 1889, 1190.



Queensland: Stradbroke Is., Coolangatta. New South Wales: Lismore, Sydney, Katoomba. Victoria: Melbourne, Grampians. Western Australia: Albany.

120. *DICHROMODES MESODONTA*, n. sp.

*μεσοδοντος*, toothed in the middle.

♂. 23 mm. Head dark fuscous irrorated with whitish; face wholly dark fuscous. Palpi  $2\frac{1}{2}$ ; dark fuscous, upper surface irrorated with whitish. Antennae grey annulated with dark fuscous, towards apex wholly dark fuscous; pectinations  $3\frac{1}{2}$ . Thorax dark fuscous irrorated with whitish. Abdomen fuscous. Legs fuscous; posterior pair grey-whitish. Forewings triangular, costa gently arched, apex round-pointed, termen slightly bowed, slightly oblique; grey-whitish densely irrorated with blackish and fuscous; antemedian line slender, whitish, edged posteriorly with blackish, straight, from one-third costa to one-third dorsum; an indistinct, median, subcostal, transverse, blackish, discal mark; postmedian line slender, whitish, edged anteriorly with blackish, from two-thirds costa to two-thirds dorsum, with a slight median angle, incurved above and beneath angle; a faint, whitish subterminal line; cilia grey with a few dark fuscous scales, apices partly whitish. Hindwings with termen rounded; grey; cilia grey.

♀. 22-24 mm. Head, thorax, and antennae wholly dark fuscous. Forewings darker; median band much darker, often blackish towards dorsum; discal dot more distinct, blackish; lines much better marked; postmedian with angle more pronounced and acute; cilia sometimes partly barred with dark fuscous.

There is considerable sexual dissimilarity.

Western Australia: Perth in October; four specimens, including one ♂, received from Mr. J. Clark; Collie in November (one ♀ in Coll. Lyell from J. K. Ewers).

121. *DICHROMODES STILBIATA*.

*Liodes stilbiata* Gn., *Lep.*, x, 120.—*Panagra plusiata* Wlk., *Cat. Brit. Mus.*, xxiii, 1007.—*Dichromodes stilbiata* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1192.

The ♂ posterior tibiae are similar to those of *D. personalis*. The conspicuous white postmedian line, nearly straight, but strongly curved outwards on dorsum, is a good distinguishing character.

Queensland: Brisbane, Stradbroke Is. New South Wales: Glen Innes, Sydney, Jervis Bay, Katoomba, Mt. Kosciusko. Victoria: Melbourne, Moe, Gisborne. Tasmania: Hobart, Lake Fenton (3,500 feet), Deloraine, Cradle Mt. (3,000 feet), Zeehan, Strahan. South Australia: Mt. Lofty, Adelaide.

122. *DICHROMODES CONSIGNATA*.

*Panagra consignata* Wlk., *Cat. Brit. Mus.*, xxiii, 1006.—*Panagra petrilineata* Wlk., *ibid.*, 1008.—*Dichromodes consignata* Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1191.

New South Wales: Bathurst. Victoria: Sale, Gisborne, Castlemaine, Dunkeld, Grampians. South Australia: Adelaide, Mt. Lofty. Western Australia: Perth.

123. *DICHROMODES RIMOSA*.

Prout, *Gen. Insect.*, *Oenochrom.*, p. 27.—*Dichromodes albitacta* Prout, *ibid.*, 27.

♂. 31-32 mm. Head grey-whitish irrorated with fuscous. Palpi  $2\frac{1}{2}$ ; fuscous, upper surface irrorated with grey-whitish. Antennae fuscous; pectinations in ♂ 6. Thorax fuscous. Abdomen ochreous-whitish irrorated with fuscous. Legs fuscous



irrorated, and tarsi annulated, with white. Forewings triangular, costa gently arched, apex round-pointed, termen slightly rounded, slightly oblique; grey-whitish more or less irrorated or suffused with fuscous; sometimes median band except towards costa is almost wholly fuscous; first line from one-fourth costa to one-third dorsum, fuscous, edged anteriorly with whitish, strongly dentate; a median, subcostal, dark fuscous, transverse, discal mark, sometimes containing a few grey-whitish scales; postmedian line from two-thirds costa to two-thirds dorsum, sinuate, fuscous, interrupted on veins by a series of whitish dots, sometimes edged posteriorly with fuscous; a fine, indistinct, whitish, dentate, subterminal line, anteriorly edged with fuscous suffusion; an interrupted blackish terminal line; grey-whitish irrorated with fuscous or grey. Hindwings with termen rounded; grey, slight whitish irroration near tornus; terminal line and cilia as forewings. Underside of forewings grey, of hindwings whitish irrorated with grey; a fuscous discal dot and wavy postmedian line on both wings.

Described from Prout's types (kindly loaned by the National Museum and Mr. Lyell), which are, I consider, certainly conspecific. It resembles some varieties of *D. usurpatrix*, but the longer antennal pectinations show it to be certainly distinct. Minor points are the grey-whitish head and strongly dentate first line of forewings.

Victoria: Nhill near Dimboola in September, Sea Lake in October.

#### 124. DICHROMODES USURPATRIX.

*Dichromodes exsignata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1178 (*nec* Wlk.).—*Dichromodes usurpatrix* Prout, *Gen. Insect.*, Oenochrom., p. 24.

Some examples of the male of *D. atrosignata* are very similar, but this species may be distinguished by the pale grey colour and inconspicuous lines of the forewings, which are quite free from any brownish tinge or suffusion, and from blackish lines. The palpi are also somewhat longer (3 to 3½). The sexes are quite similar.

New South Wales: Sydney. Victoria: Melbourne, Beaconsfield, Gisborne. South Australia: Mt. Lofty.

#### 125. DICHROMODES BERTHOUDI.

Prout, *Gen. Insect.*, Oenochrom., p. 27.

Extremely similar to *D. usurpatrix*, but the palpi are distinctly shorter (♂ 2¼), the antemedian line of the forewings is more distinctly dentate, the discal dot is not pale-centred, and the white spot on costa posterior to the postmedian line is more conspicuous.

Western Australia: Waroona, Collie.

#### 126. DICHROMODES ORNATA.

*Panagra ornata* Wlk., *Cat. Brit. Mus.*, xxiii, 1004.—*Dichromodes ornata* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1189.—*Dichromodes orthogramma* Low., *Trans. Roy. Soc. S. Aust.*, 1894, 81.

Probably, I think, Walker intended to name this species *inornata*, but by some accident the first syllable was omitted. It is an obscure species, and some of its variations are puzzling, and not to be understood without the aid of a good series. The palpi vary from rather pale fuscous to grey. The antemedian and postmedian pale lines are very faint, and the former may be obsolete. The



latter may be rather broadly edged with dark fuscous, or by a very thin line, or by minute dots, and may be nearly straight, wavy, or with a distinct median angle. The antemedian line has rarely a linear fuscous edge, more often this is replaced by dots, and even these may be obsolete.

North Australia: Darwin. North Queensland: Cairns. Queensland: Duaringa, Caloundra, Brisbane, Stradbroke Is., Southport, Coolangatta, Toowoomba. New South Wales: Sydney, Katoomba.

#### Genus 14. ADEIXIS.

Warr., *Novit. Zool.*, 1897, 27.

Face with anterior projecting cone of scales. Palpi moderate, porrect; second joint thickened with appressed hairs; terminal joint concealed. Antennae of ♂ bipectinate, inner row of pectinations much shorter than outer towards base, but becoming equal towards middle, extreme apex simple. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Posterior tibiae of ♂ slightly dilated with internal groove and tuft. Tarsi not spinulose. Forewings with areole present, 8, 9, 10 stalked from areole, 11 free. Hindwings with 6 and 7 closely approximated at origin, 7 from near before angle, 12 approximated to cell to about three-fourths.

Type, *A. inostentata* Wlk.

There are only two species, the second being *A. griseata* Huds. from New Zealand. The genus is closely allied to *Dichromodes*, differing only in the bipectinate ♂ antennae.

#### 127. ADEIXIS INOSTENTATA.

*Panagra inostentata* Wlk., *Cat. Brit. Mus.*, xxiii, p. 1012.—*Adeixis insignata* Warr., *Novit. Zool.*, 1897, 27.—*Paragyrtis inostentata* Meyr., *Trans. Ent. Soc. Lond.*, 1905, 222.

♂. 20-26 mm. ♀. 18-24 mm. Head and thorax whitish-grey. Palpi in ♂  $2\frac{1}{4}$  to  $2\frac{1}{2}$ , in ♀  $2\frac{1}{2}$  to 3; ferruginous-brown. Antennae ochreous-grey-whitish; pectinations in ♂, outer row  $3\frac{1}{2}$ , inner row  $1\frac{1}{2}$ . Abdomen grey-whitish. Legs grey; posterior pair whitish. Forewings triangular, costa slightly arched, apex pointed, termen slightly rounded, oblique; grey densely irrorated with whitish; costal edge dark grey; a minute, fuscous, median, subcostal, discal dot; a grey line or shade from mid-dorsum to costa near apex, sometimes thickened towards dorsum, often very slender or obsolete, occasionally slightly dentate; a slender fuscous terminal line; cilia grey, apices white on costal half. Hindwings with termen rounded; whitish or whitish-grey; cilia whitish-grey.

Northern Territory: Melville Is. North Queensland: Herberton. Queensland: Yeppoon, Nambour, Caloundra, Brisbane, Stradbroke Is. New South Wales: Lismore, Sydney, Katoomba, Jervis Bay. Victoria: Beaconsfield, Gisborne. Tasmania: Hobart, Strahan. South Australia: Mt. Lofty. Western Australia: Waroona, Bridgetown.

#### Genus 15. XENOGENES.

Meyrick, in Prout, *Gen. Insect.*, Oenochrom., p. 12.

Face smooth, slightly rounded or flat. Tongue present. Palpi short or moderate, porrect or subascending, thickened with appressed scales; terminal joint minute. Antennae in ♂ sometimes dentate, moderately or shortly ciliated.



Thorax and abdomen slender; the latter not hairy beneath. Femora smooth. Posterior tibiae with two pairs of spurs; in ♂ somewhat dilated. Tarsi not spinulose. Forewings with 2 from three-fourths, 6 from beneath upper angle, a rather large and broad areole, from which 7 and 10 arise separately, 11 free, not closely approximated to areole. Hindwings with 3 and 4 approximated at base, 5 from middle of cell, 6 and 7 stalked, 12 approximated to cell from base, separating before middle or shortly before end of cell.

Type, *X. chrysoplaca* Meyr.

I have not seen this species, and have been able to examine only *X. eustrotiodes*. There are structural differences between them, but it is doubtful whether they are of generic value.

#### 128. XENOGENES CHRYSOPLACA.

Meyr., in Prout, *Gen. Insect.*, Oenochrom., p. 13.

Queensland: Duaringa.

#### 129. XENOGENES EUSTROTIODES.

*Xenogenes ? eustrotiodes*, Prout, *Gen. Insect.*, Oenochrom., p. 13.

♂. 18-21 mm. Head and thorax fuscous mixed with white and ochreous. Palpi 1; fuscous, apex ochreous. Antennae fuscous; in ♂ slightly serrate, minutely ciliated. Abdomen ochreous. Legs fuscous; posterior tibiae ochreous-whitish. Forewings triangular, costa nearly straight, apex rounded, termen slightly rounded, slightly oblique; white with fuscous and grey markings; a short fuscous bar on costa from base; a moderately broad fuscous transverse fascia, its anterior margin from one-fifth costa to one-third dorsum, outwardly curved and indented in middle, posterior from two-fifths costa to mid-dorsum; a fuscous dot on three-fifths costa giving rise to an outwardly curved line to half-way across disc, in its concavity a large grey spot, midway between this and fascia a short transverse grey line; a fuscous fascia from costa before apex, broadest on costa where it is divided by a white dot, narrowing to a point in mid-disc, thence connected by an interrupted grey line with a small grey tornal blotch; fine white subterminal and submarginal lines, the former dentate, separated by a broad grey line; an interrupted fuscous terminal line; cilia white, faintly barred with grey. Hindwings with termen rounded; whitish-ochreous; a fuscous median discal mark; a fuscous mark on two-thirds dorsum; a fuscous terminal band, sometimes incomplete towards tornus; cilia as forewings.

Western Australia: Perth, Waroona.

#### Genus 16. SYMPHYLISTIS, n. gen.

*συμφυλίστις*, of the same race.

Face smooth, not projecting. Palpi moderate, porrect; second joint thickened, with appressed scales; terminal joint minute. Antennae of ♂ bipectinate, extreme apex simple, pectinations moderately long. Thorax and abdomen slender; the former not hairy beneath. Femora smooth. Tarsi not spinulose. Forewings with 11 free, 10 and 9 long-stalked from cell, 9 anastomosing immediately after separation at a point with 8 to form a long narrow areole, 7 from shortly before end of areole, 5 from middle of cell. Hindwings with 3 and 4 separate, 5 from above middle of cell (three-fifths), 6 and 7 approximated at origin, 12 closely approximated to cell as far as two-thirds, thence diverging.



Unfortunately in the single known example both hindlegs are missing, but probably the posterior tibiae have two pairs of spurs. The genus appears to be a primitive one, very low on the stem from which arises the *Dichromodes* group, and intermediate between this group and *Circopetes*. The only known species is Western Australian.

130. SYMPHYLISTIS LEPTOCYMA, n. sp.

λεπτοκυμος, slenderly waved.

♂. 32 mm. Head and thorax grey with fine whitish irroration; face fuscous-brown. Palpi 1 $\frac{3}{4}$ ; fuscous-brown. Antennae grey; pectinations in ♂ 6. Abdomen grey; apices of segments narrowly whitish. Legs fuscous; tarsi with fine whitish annulations. Forewings triangular, costa straight, apex acute, termen bowed on vein 4, crenulate, oblique; grey, with very slender fuscous lines; a fuscous dot on one-fourth costa, giving rise to a slender line sharply long-toothed beneath costa, shortly toothed in middle, thence oblique to one-sixth dorsum; a median, subcostal, blackish, discal dot; a fuscous mark on three-fourths costa, giving rise to a fine line sharply dentate beneath costa, thence oblique and nearly straight to one-third dorsum; this is succeeded by three, parallel, slightly waved lines, posteriorly edged with whitish from dorsum to termen; a terminal line; cilia brownish-grey. Hindwings with termen dentate on veins 4 and 7, wavy elsewhere; as forewings but without first line, and second line not dentate. Underside similar but more obscure.

Type in Coll. Lyell.

Western Australia: Waroona in July; one specimen (G. F. Berthoud).

Genus 17. DINOPHALUS.

Prout, *Gen. Insect.*, Oenochrom., p. 46.

Face with strong conical corneous projection, sometimes terminating in one or two sharp corneous processes. Palpi moderately long, porrect or obliquely ascending; second joint roughly hairy; terminal joint moderate or short. Tongue strongly developed. Antennae in ♂ unipectinate, towards apex simple, pectinations long (rarely with a shorter inner row). Thorax and abdomen stout; the former densely hairy beneath. Femora hairy. Posterior tibiae without middle spurs. Tarsi spinulose. Forewings with 11 anastomosing with or running into 12, 10 and 9 long-stalked, 9 anastomosing with 8 immediately after origin (sometimes arising at point of anastomosis), forming a long narrow areole, 7 from end or near end of areole. Hindwings with 5 from middle or above middle of cell, 6 and 7 separate, connate or stalked, 12 anastomosing with cell for a considerable distance.

Type, *D. cyanorrhæa* Low.

I include here *Ophiographa* Prout and *Lissocraspeda* Prout. The frontal armature, which is an adaptation to facilitate the emergence of the imago from the pupal shell, is here, I consider, only a specific character. The neurational variations occur in nearly related species, and probably further material will show that they occur in the same species. In one example I found that 12 of forewing separates just before costa. The genus is a natural whole, closely allied to *Lissomma*, but easily separated by the absence of middle spurs. It also has a much stronger frontal process, even when this is not terminated by a sharp hook or points.



*Key to Species.*

1. Frontal prominence terminating in two sharp points ..... 2  
Frontal prominence terminating in a single point ..... 5
2. Frontal prominence with terminal spikes porrect ..... 3  
Frontal prominence with terminal spikes hook-like and directed downwards .. 4
3. Forewings with a sinuous fuscous line from one-third dorsum towards apex ..... *cyanorrhæa*. 131  
Forewings with oblique, dentate, antemedian line ..... *idiocrana*. 132
4. Forewings with transverse, dentate, antemedian line ..... *eremæa*. 133  
Forewings without such line ..... *pygmaea*. 134
5. Frontal prominence terminating in a sharp hook directed downwards ..... 6  
Frontal prominence with obtuse apex ..... *drakei*. 140
6. Forewings with five blackish transverse lines ..... *serpentaria*. 135  
Forewings with two blackish transverse lines ..... 7
7. Forewings with a subterminal series of fuscous blotches edged posteriorly with whitish ..... *macrophyes*. 136  
Forewings without subterminal series of blotches ..... 8
8. Forewings with postmedian line from near base of dorsum ..... *lechiomita*. 137  
Forewings with postmedian line from dorsum well beyond middle ..... 9
9. Hindwings grey towards base ..... *postmarginata*. 138  
Hindwings white towards base ..... *dilutaria*. 139

## 131. DINOPHALUS CYANORRHÆA.

*Hypographa cyanorrhoea* Low., *Trans. Roy. Soc. S. Aust.*, 1903, 191.

♂. 24 mm. Head whitish with a few fuscous scales; fillet fuscous; face with a strong, porrect, flattened, corneous projection, its anterolateral angles prolonged into a pair of sharp spikes. Palpi rather long and slender, closely applied to frontal projection; whitish mixed with fuscous; second joint long; terminal joint very short. Antennae grey; pectinations in ♂ 5. Thorax fuscous mixed with whitish. (Abdomen and hindlegs missing.) Legs grey; anterior pair mostly fuscous. Forewings elongate, narrow, costa straight almost to apex, apex pointed, termen strongly oblique, irregularly dentate, being toothed on veins 3, 4 and 6; grey; a suffused fuscous line from one-third dorsum, very oblique towards, but not reaching, costa before apex, slightly bisinuate, followed by a broad whitish suffusion, bisected by a fine fuscous line from dorsum to costa near before apex; a faint parallel line follows this; cilia dark-grey with some whitish scales between dentations. Hindwings rather broad, apex obtusely rounded, angled and toothed on vein 3; 6 and 7 short-stalked; grey; a suffused, whitish, transverse, median band, containing a fine transverse grey line; cilia as forewings.

Described from Lower's type, which appears to be unique.

Central Australia: Alice Springs.

## 132. DINOPHALUS IDIOCRANA, n. sp.

*ἰδιοκρανος*, with peculiar head.

♂. 26-28 mm. ♀. 30 mm. Head fuscous irrorated with whitish; face with a strong, porrect, flattened, corneous projection, its anterolateral angles prolonged into a pair of sharp spikes; when the palpi are depressed a short corneous shelf is seen projecting from lower margin of face, and the superior projection is seen to be hollowed on each side, with a median ridge. Palpi moderate, porrect; fuscous irrorated with whitish. Antennae fuscous irrorated with whitish; pectinations in ♂ 8, in ♀ 3½, lessening towards base and apex, apical third simple. Thorax and abdomen fuscous with whitish irroration. Legs dark-fuscous irrorated with whitish; first joint of posterior tarsi in ♂ dilated and deeply excavated on ventral surface. Forewings narrow, elongate, triangular, costa nearly straight but slightly



sinuate, apex pointed, termen very irregular with rounded projections on veins 3 and 7; fuscous mixed with whitish, appearing grey; a dark fuscous line from midcosta to one-fourth dorsum, strongly dentate, with a posterior tooth above and another beneath middle; an irregularly waved dark-fuscous line from costa just before apex to three-fourths dorsum, sometimes preceded by a more suffused line; a very indistinct whitish subterminal line; cilia dark-fuscous with some whitish bars between projections. Hindwings with termen irregularly waved; pale-grey; a wavy fuscous postmedian line; cilia as forewings.

North Queensland: Townsville in January (F. P. Dodd). N.W. Australia: Sherlock River (Coll. Lyell). Three specimens.

### 133. DINOPHALUS EREMAEA.

*Hypographa eremaea* (misprinted *oea*) Low., *Trans. Roy. Soc. S. Aust.*, 1907, 171.

♂. 24-30 mm. ♀. 30-32 mm. Head and thorax grey; face with a long, truncated, cone-shaped projection ending in two short chitinous hooks directed downwards. Palpi 2; grey. Antennae grey; pectinations in ♂ 10, in ♀ 3. Abdomen whitish-grey; apices of segments fuscous. Legs fuscous; posterior pair paler. Forewings elongate-triangular, costa straight, apex subrectangular, termen rounded, oblique; grey; a suffused, whitish, subcostal, median, discal spot; a blackish line from one-third costa to one-third dorsum, with two acute posterior teeth, one above and one beneath middle; a similar line from five-sixths costa to two-thirds dorsum, irregularly bisinuate; a suffused, dentate, whitish, subterminal line; cilia whitish, apices and bars opposite veins fuscous. Hindwings with termen rounded, sinuate towards tornus; white; two slender, more or less obsolete, transverse, postmedian, fuscous lines, sometimes indicated on dorsum only; a terminal fuscous suffusion more pronounced towards tornus; cilia white, on tornus fuscous.

In some examples the two lines are connected by a crossline above dorsum.

North Australia: Darwin. North Queensland: Cape York, Claudie River, Cairns, Townsville.

### 134. DINOPHALUS PYGMAEA.

*Lissocraspeda pygmaea* Prout, *Novit. Zool.*, 1913, p. 390.

♂. 19 mm. Head fuscous; frons strongly produced in a long truncate scale-covered process. Palpi 2; fuscous. Antennae grey; pectinations in ♂ 8. Thorax fuscous. Abdomen whitish with grey irroration, apices of segments grey. Legs fuscous irrorated, and tarsi annulated, with whitish. Forewings triangular, costa straight, apex round-pointed, termen long, bowed, oblique; fuscous without defined markings; a dark-fuscous mark on one-third costa; a fine irregular dark-fuscous line at three-fourths; cilia fuscous. Hindwings with termen rounded, tornus slightly produced; white; a fuscous submarginal dot opposite three-fifths dorsum, a second linear posterior to this, and a short parallel line before tornus; some fuscous suffusion near termen; cilia whitish, on tornus dark-fuscous. Under side of forewings grey; of hindwings white with a dark-fuscous terminal line, a few dark-fuscous scales towards costa, but no tornal markings except in cilia.

N.W. Australia: Sherlock River. Described from the British Museum type.

### 135. DINOPHALUS SERPENTARIA.

*Hypographa serpentaria* Gn., *Ann. Soc. Ent. Fr.*, (4) iv, 1864, 16; *Eutelia undulifera* Wlk., *Cat. Brit. Mus.*, xxxiii, 1865, 824.



♂, ♀. 34-36 mm. Head and thorax fuscous mixed with whitish; face with strong corneous projection ending in a sharp hook directed downwards. Palpi 1½; fuscous mixed with whitish. Antennae fuscous; in ♀ simple; pectinations in ♂ 6. Abdomen fuscous mixed with whitish. Legs dark-fuscous; tibiae and tarsi with whitish annulations. Forewings elongate-triangular, costa nearly straight but slightly sinuate, apex rounded, termen rounded, oblique, deeply dentate; grey; markings blackish partly edged with whitish; a short line from costa near base; wavy transverse lines at about one-eighth, one-fourth and three-eighths; a transverse, subcostal, median, discal lunule; a line from five-eighths costa strongly bent inwards beneath discal mark, crossing third line, ending on dorsum between second and third lines; a very sharply dentate, posteriorly white-edged line from three-fourths costa to two-thirds dorsum; an irregularly waved, posteriorly white-edged, subterminal line; a blackish terminal line; cilia fuscous, apices whitish between dentations. Hindwings with termen rounded, dentate; grey; basal third white with a grey discal mark near posterior edge; the grey area is edged with a fuscous line, and contains two transverse fuscous lines partly edged posteriorly with whitish; terminal line and cilia as forewings.

Victoria: Melbourne, Beaconsfield.

#### 136. DINOPHALUS MACROPHYES.

*Ophiographa macrophyes* Prout, *Gen. Insect.*, Oenochrom., p. 48.

♂. 30 mm. Head fuscous; face with a rather slender, down-curved, acute, apical hook. Palpi 2; dark-fuscous. Antennae fuscous; pectinations in ♂ 4. Thorax fuscous with some whitish hairs. Abdomen dark-grey; a brown transverse bar beyond middle, thence paler; under side whitish-grey with some ochreous-tinge towards base. Legs densely hairy, whitish mixed with pale-grey; anterior pair dark-grey. Forewings elongate-triangular, costa nearly straight, apex obtusely pointed, termen rounded, crenulate, oblique; grey, blotched with fuscous; a subbasal transverse series of fuscous blotches; a blackish line from one-fifth costa to one-third dorsum, rather irregular, with an acute posterior median projection, edged anteriorly, except median tooth, with white; a transverse, blackish, antemedian, discal mark; a blackish line, edged posteriorly with white, from three-fourths costa to two-thirds dorsum, bent inwardly beneath costa, thence outwardly-curved, bent inwardly again above dorsum; this is preceded and followed by transverse series of fuscous blotches, of which the second is edged posteriorly with whitish; an interrupted blackish terminal line; cilia fuscous, in crenulations white. Hindwings with termen slightly rounded, crenulate; grey; a suffused, wavy, fuscous, transverse line before middle; a fine, fuscous, posteriorly white-edged, transverse line after middle; terminal line and cilia as forewings. Under side of forewings grey, with fuscous, white-edged, postmedian line; of hindwings grey-whitish, with broad, dark-fuscous, postmedian band.

Western Australia: Albany, Kojareena (Waterhouse).

#### 137. DINOPHALUS LECHRIOMITA, n. sp.

λεχριομιτος, with oblique threads.

♂. 34 mm. Head and thorax grey with whitish irroration; face with strong corneous prominence ending in a sharp median hook directed downwards. Palpi 2; grey with whitish irroration. Antennae grey with whitish irroration; in ♂ bipectinate to apex, outer pectinations long (8), inner much shorter (2½).



Abdomen grey with whitish irroration. Legs fuscous, irrorated, and tarsi annulated, with whitish. Forewings elongate, suboval, costa straight, apex rounded, termen long, rounded, strongly oblique; wavy; grey densely irrorated with whitish; two very oblique, fine, wavy, blackish lines; first from base, at first longitudinal then curved towards, but not reaching, costa near apex; second from dorsum near base to apex, curved; indications of a fuscous line intermediate between these; a fine blackish terminal line; cilia grey, apices and bases whitish. Hindwings with termen rounded, wavy; whitish; towards termen broadly suffused with grey; an interrupted blackish terminal line; cilia whitish.

Peculiar in antennal structure, but as it agrees with this genus in all other respects, separation appears undesirable. Even the specialized structure of the face is exactly as in other species of the *serpentaria* group. The only difference is the presence of a short inner row of antennal pectinations.

Central Australia Museum Expedition, 1916. One specimen in the South Australian Museum.

#### 138. DINOPHALUS POSTMARGINATA.

*Ophiographa postmarginata* Prout, *Novit. Zool.*, 1913, 390.

♂, ♀. 23-24 mm. Head brownish-fuscous; frons strongly projecting, obliquely conical, ending in a hook-like, corneous process, which projects downwards between palpi. Palpi  $1\frac{1}{2}$ ; brownish-fuscous. Antennae pale brownish-fuscous; pectinations in ♂ 8. Thorax brownish-fuscous. Abdomen whitish-brown, extreme base in ♂ narrowly white. Legs fuscous; posterior pair partly whitish; all tarsi annulated with whitish; posterior pair with terminal spurs only in both sexes. Forewings triangular, costa straight; apex round-pointed, termen long, bowed, oblique, wavy; brownish-fuscous; markings dark-fuscous; a sharply dentate line from one-third costa to mid-dorsum; a discal dot beneath midcosta; an irregularly dentate, slightly sinuate line from three-fourths costa to three-fourths dorsum, edged posteriorly by a pale line, or sometimes obscured by a postmedian fuscous suffusion; an interrupted terminal line; cilia whitish; at apex and tornus fuscous. Hindwings with termen rounded and slightly sinuate beneath apex and before tornus; white; a minute median fuscous discal dot; a terminal fuscous band, broader in ♀; traces of a darker dentate postmedian line; cilia whitish, towards tornus fuscous. Under side of forewings grey; of hindwings whitish, with fuscous discal dot, but without terminal band.

N.W. Australia: Sherlock River; two specimens, including the type, in the British Museum.

#### 139. DINOPHALUS DILUTARIA.

*Hypographa dilutaria* Warr., *Novit. Zool.*, 1903, 260.

♀. 27 mm. Head and thorax fuscous; face with a strong anterior projection ending in an acute hook directed downwards. Abdomen whitish. Forewings grey; basal and postmedian areas fuscous, but the latter grey towards termen; a blackish, curved, slender, transverse line at one-third with five strong posterior teeth; a thicker and more suffused line from three-fourths costa to two-thirds dorsum, crenulate, edged anteriorly with brownish; an indistinct discal dot; an interrupted terminal line; cilia grey with fuscous bars opposite veins. Hindwings grey with fuscous terminal band.



I have not seen this species. The description is translated from that of Warren; the structure of the frontal process is given by Prout.

N.W. Australia: Roeburne.

#### 140. DINOPHALUS DRAKEI.

*Ophiographa drakei* Prout, *Gen. Insect.*, Oenochrom., p. 48.

♂, ♀. 34-36 mm. Head fuscous finely irrorated with whitish; face with a strong corneous projection ending in an obtuse apex somewhat bent downwards. Palpi 1½; fuscous mixed with whitish. Antennae fuscous; in ♀ simple; pectinations in ♂, 4. Thorax with rounded anterior and slight posterior crest; fuscous finely irrorated with whitish. Abdomen fuscous-grey. Legs fuscous; some irroration, and obscure tarsal annulations, whitish. Forewings elongate-triangular, costa straight, sometimes sinuate before apex, apex acute, termen rounded, slightly oblique, sinuate; grey, sometimes with darker antemedian and postmedian bands; a blackish line from one-third costa to two-fifths dorsum; outwardly curved, indented above middle, and more deeply above dorsum; an irregularly sinuate and dentate blackish line from four-fifths costa to two-thirds dorsum; an obscure, dentate, whitish, subterminal line, not always developed; an interrupted blackish terminal line; cilia fuscous, bases whitish between dentations. Hindwings with termen rounded, dentate; grey, becoming paler towards base; a median discal dot and a fine, fuscous, postmedian, transverse line, both faintly marked; an interrupted blackish terminal line; cilia whitish with a median fuscous line. Under side of hindwings with a large blackish terminal blotch.

New South Wales: Sydney, Jervis Bay, Katoomba. Victoria: Beaconsfield. South Australia: Mt. Lofty.

#### Genus 18. LISSOMMA.

Warr., *Novit. Zool.*, 1905, 418; Prout, *Gen. Insect.*, Oenochrom., p. 49.

Face densely hairy, sometimes with rounded prominence. Palpi moderately long, porrect; second joint densely hairy beneath; terminal joint smooth, cylindrical, obtuse. Antennae of ♂ unipectinate, towards apex simple, pectinations long; in ♀ shortly unipectinate or simple. Thorax stout, more or less crested posteriorly; under side densely hairy. Femora hairy. Posterior tibiae of ♂ with two pairs of spurs. Tarsi spinulose. Forewings with 11 anastomosing with or running into 12, 10 and 9 long-stalked, 9 anastomosing with 8 to form a long narrow areole, 7 from end or near end of areole. Hindwings with 5 from above middle of cell, 6 and 7 separate, connate, or stalked, 12 anastomosing with cell to three-fourths.

Type, *L. himerata* Warr.

Differs from *Hypographa* in the strong anastomosis of 12 of hindwings with cell.

#### Key to Species.

1. Forewings whitish or pink ..... 2
- Forewings dark-fuscous or grey ..... 3
2. Forewings wholly pink ..... *himerata*. 141
- Forewings whitish, towards costa pinkish tinged ..... *minuta*. 142
3. Forewings wholly or partly dark-fuscous, hindwings with defined white basal area ..... 4
- Forewings and hindwings grey, the latter without defined white basal area .. 6
4. Hindwings with dark-fuscous terminal blotch leaving apex white .. *incongrua*. 143
- Hindwings with grey terminal band including apex ..... 5



5. Forewings grey with dark-fuscous fasciae ..... *ampycteria*. 144  
 Forewings dark-fuscous ..... *hiracopis*. 145  
 6. Forewings with dark-fuscous postmedian fascia, its anterior edge straight and sharply defined ..... *atmoscia*. 146  
 Forewings posteriorly suffusedly darker with acutely dentate postmedian line ..... *macrodonta*. 147

## 141. LISSOMMA HIMERATA.

Warr., *Novit. Zool.*, 1905, 418.

♀. 35 mm. Head, thorax, and abdomen pink. Forewings deep pink; a slightly darker, anteriorly pale-edged, slender, straight line from three-fifths costa to mid-dorsum; a similar line, posteriorly pale-edged, slightly curved, from costa shortly before apex to three-fourths dorsum; cilia pink. Hindwings as forewings but without median line, and with costal half of wing whitish. Under side pink; the dorsum of forewings narrowly, of hindwings broadly, whitish.

I have not seen this species. The description is adapted from Warren.

North Australia: Eureka (Tunney, Feb., 1903).

## 142. LISSOMMA MINUTA.

*Monoctenia minuta* Swin., *Ann. Mag. Nat. Hist.*, (7) ix, 1902, 167.—*Hypographa pallida* Warr., *Novit. Zool.*, 1902, 347.—*Lissomma minuta* Warr., *Novit. Zool.*, 1905, 418.

♀. 27-32 mm. Head and thorax ochreous-whitish; face rounded, prominent. Palpi 2; ochreous-whitish, pinkish-tinged. Antennae ochreous-whitish; pectinations in ♀ 3. Abdomen ochreous-whitish tinged with pinkish towards base of dorsum. Legs ochreous-whitish; anterior pair pinkish. Forewings triangular, costa straight, apex pointed, termen rounded, slightly oblique; ochreous-whitish, towards costa pinkish-tinged; markings very pale grey; a slender line from one-third costa to two-fifths dorsum, outwardly-curved; a transverse discal mark beneath midcosta; a slender oblique line, sometimes wavy, from three-fourths costa to three-fourths dorsum; cilia concolorous. Hindwings with termen gently rounded; whitish, towards termen grey-whitish; a very pale grey transverse line at three-fourths; cilia grey-whitish. Under side similar but more obscure.

Described from a series of six specimens in the British Museum.

N.W. Australia: Sherlock River.

## 143. LISSOMMA INCONGRUA.

*Agrotis incongrua* Wlk., *Cat. Brit. Mus.*, x, 353.

♂, ♀. 36-40 mm. Head and thorax dark-fuscous; face with moderate rounded prominence. Palpi 1½; dark-fuscous. Antennae dark-fuscous, in ♀ simple; pectinations in ♂ 6. Abdomen grey; under side whitish; apical segment and tuft fuscous. Legs fuscous; tarsi annulated with whitish. Forewings elongate-triangular, costa straight, apex pointed, termen rounded, oblique, crenulate; dark-fuscous; a little whitish irroration on base of dorsum; a blackish line from one-third costa to one-third dorsum with a few whitish marginal points, a slight posterior tooth above middle and another, more prominent, above dorsum; a similar, finely dentate, sinuate line from two-thirds costa to two-thirds dorsum; a suffused, blackish, sinuate, median line between these; a very fine, doubly sinuate, white sub-terminal line, preceded by short blackish streaks on veins; an interrupted blackish terminal line; cilia dark-fuscous. Hindwings with termen slightly rounded,



crenulate; white; a large dark-fuscous terminal blotch extending nearly to costa, but leaving apex white; cilia dark-fuscous, towards apex white. Under side of forewings grey almost without markings; of hindwings like upper side, but with some dark-fuscous irroration, and with two dark-fuscous transverse lines immediately preceding blotch.

New South Wales: Jervis Bay (Moss-Robinson). South Australia: Adelaide (in South Australian Museum).

144. LISSOMMA AMPYCTERIA, n. sp.

ἀμπυκτηριος, banded.

♂. 24 mm. Head with loose hairs projecting forwards between antennae, face rounded, prominent, hairy; fuscous with some whitish hairs. Palpi 1½; covered with long loose fuscous hairs. Antennae fuscous; pectinations in ♂ 5. Thorax fuscous with some whitish hairs anteriorly. Abdomen fuscous. Legs grey; tarsi fuscous. Forewings elongate-triangular, costa straight almost to apex, apex rounded, termen rounded, dentate, slightly oblique; grey; markings dark-fuscous; median and dorsal short acute streaks from base; a fine antemedian line from one-third costa to one-third dorsum, angled outwards beneath costa, inwards above middle; a moderate median transverse fascia; a slender postmedian line from three-fourths costa to two-thirds dorsum, angled inwards beneath costa and above dorsum; following this a subterminal fascia; a terminal line; cilia fuscous, toward tornus grey in indentations. Hindwings with termen nearly straight, dentate; whitish; a fuscous antemedian discal dot; a broadly suffused fuscous terminal band, containing suffused straight blackish postmedian and terminal lines; cilia whitish, becoming fuscous near tornus. Under side of forewings fuscous; of hindwings whitish with blackish discal dot and large tornal blotch connected with costa beyond middle.

Differs from *L. hiracopis* in the grey colouring and dark-fuscous fasciae of forewings and the differently formed postmedian line; also in the tornal blotch on underside of hindwings.

Western Australia: Eradu, near Geraldton, in September (A. J. Nicholson); one specimen in Coll. Goldfinch.

145. LISSOMMA HIRACOPIS.

*Hypographa hiracopis* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1211.—*H. bathrosema* Prout, Ann. Mag. Nat. Hist., (8) viii, 1911, 702.

I have a ♂ example which corresponds nearly to Meyrick's description, but has in addition a fine, crenulate, whitish, subterminal line, strongly indented above middle and again above dorsum. Also a ♀ which lacks the whitish irroration of the ♂, is much darker, and more closely resembles *incongrua*. Antennae unipectinate in both sexes, pectinations in ♂ 10, in ♀ 3. These structural characters clearly distinguish it from that species.

South Australia. Western Australia: Perth.

146. LISSOMMA ATMOSCIA.

*Hypographa atmoscia* Meyr., PROC. LINN. SOC. N.S.W., 1889, 1213.

♂. 40 mm. Antennae of ♂ unipectinate, apical third simple, pectinations 5. Posterior tibiae of ♂ with two pairs of spurs, outer terminal spur short, inner



terminal spur very long, broad, flattened, and obtuse. These particulars are taken from an example in the Queensland Museum presented by Mr. G. H. Hardy.

Western Australia: Perth.

147. LISSOMMA MACRODONTA, n. sp.

μακροδοντος, with long teeth.

♀. 36-42 mm. Head grey mixed with whitish; face with strong rounded prominence densely covered with rough hairs. Palpi 2, second joint with long spreading hairs beneath; grey, apices of hairs paler. Antennae grey; in ♀ unipectinate, pectinations 5. Thorax and abdomen fuscous-grey mixed with whitish. Legs fuscous-grey irrorated with whitish. Forewings narrow, elongate, triangular, costa nearly straight but slightly sinuate, apex acute, termen rounded, oblique, dentate; fuscous-grey partly suffused with whitish, absence of this suffusion leaves a darker distal and dorsal area, which is variable in degree of development; a fine fuscous line from one-third costa to one-third dorsum, with a long acute indentation above middle, and another above dorsum; a similar line from two-thirds costa to two-thirds dorsum, with numerous, very long, acute dentations; fine fuscous streaks on veins in terminal area; an interrupted fuscous terminal line; cilia grey mixed with whitish. Hindwings elongate, termen only slightly rounded, dentate; grey becoming whitish-grey towards base; an interrupted fuscous terminal line; cilia white obscurely barred with grey.

South Australia: Mt. Lofty (Hope Valley) in May, one specimen in South Australian Museum. Western Australia: Quairading (L. J. Newman), a more sombre example with antemedian line of forewings obsolete and postmedian line only just traceable, in my own collection.

Genus 19. ENCHOCRANA, n. gen.

εγχοκρανος, spear-headed.

Face with a long, porrect, laterally compressed, very sharp, anterior, corneous spike. Palpi rather short, porrect; second joint shortly hairy; terminal joint minute. Antennae unipectinate in both sexes. Thorax moderate; beneath hairy. Femora smooth. Posterior tibiae with two pairs of spurs. Tarsi not spinulose. Forewings with 11 anastomosing with 12 and 10, areole long and narrow. Hindwings with 3 and 4 widely separate, 5 from well above middle of cell (three-fifths or two-thirds), 6 and 7 stalked, 12 very closely applied to cell from one-fourth to three-fourths.

Allied to *Dinophalus*. Although 12 of hindwings does not actually anastomose with the cell, it comes very close to doing so.

148. ENCHOCRANA LACISTA, n. sp.

λακιστος, torn.

♀. 30-32 mm. Head grey, with small white tufts at bases of antennae. Palpi grey mixed with whitish. Antennae grey; pectinations in ♀ 1½. Thorax, abdomen, and legs grey. Forewings elongate-triangular, costa gently and uniformly arched, apex acute, termen strongly oblique, sinuate, slightly crenulate; grey with slight fuscous irroration; very slender, oblique, darker lines faintly indicated; first from one-fourth dorsum towards one-third costa; second from mid-dorsum to midcosta; third from three-fourths dorsum to costa before apex, slightly dentate; cilia grey obscurely barred with whitish. Hindwings triangular, termen



not rounded, prominent and sharply toothed at apex, with a still longer acute median tooth on vein 4; colour, lines, and cilia as forewings, but without first line, and with median line obscurely double. Under side with fuscous discal dot and large circular subterminal spot on both wings, spot on hindwings connected by a subterminal line to dorsum.

The wing-shape, especially of hindwings, is very peculiar.

Western Australia: Cunderdin; three specimens received from Mr. R. Illidge.

#### Genus 20. HYPOGRAPHA.

Gn., *Lep.*, ix, p. 189; Meyr., *PROC. LINN. SOC. N.S.W.*, 1889, 1210; Prout, *Gen. Insect.*, *Oenochrom.*, p. 49.

Face not prominent, but with projecting hairs. Palpi moderately long, porrect or slightly ascending; second joint densely hairy; terminal joint moderate, cylindrical, obtuse. Tongue strongly developed. Antennae of ♂ unipectinate, towards apex simple, pectinations moderate or long. Thorax stout; posteriorly more or less crested; beneath densely hairy. Femora hairy. Posterior tibiae with two pairs of spurs. Tarsi spinulose. Forewings with 11 anastomosing with 12, 10 and 9 long-stalked, 9 anastomosing with 8 to form a long narrow areole, 7 from end or near end of areole. Hindwings with 5 from above middle of cell, 6 and 7 separate, connate, or stalked, 12 closely appressed to middle of cell.

Type, *H. phlegetonaria* Gn.

1. Forewings with white line from costa near apex to dorsum, twice strongly incurved ..... *epiodes*. 149  
Forewings without such line ..... 2
2. Forewings with strong sinuate dark-fuscous line from two-thirds costa to three-fifths dorsum ..... *aristarcha*. 150  
Forewings without such line ..... *phlegetonaria*. 151

#### 149. HYPOGRAPHA EPIODES, n. sp.

ἡπιωδης, soft, gentle.

♂. 28 mm. Head grey. Palpi 1½; grey. Antennae grey; pectinations in ♂ 8, ochreous-tinged. Thorax with a bifid posterior crest; pectus reddish-tinged. Abdomen grey, apices of segments paler; tuft and under side whitish. Legs grey; anterior and middle tibiae irrorated with crimson; posterior pair grey-whitish. Forewings short, triangular, costa bisinuate, apex acutely pointed, termen slightly rounded, very strongly crenulate or lobulate, scarcely oblique; whitish-grey, becoming darker towards costa, with some fuscous strigulae most pronounced on costa; a suffused grey-whitish spot on base of dorsum, followed by a small fuscous-brown spot in disc; a suffused grey-whitish line from beneath one-fourth costa to one-third dorsum, edged posteriorly by fuscous-brown spots above and below middle; a slender white line from costa before apex, inwardly oblique to three-fourths dorsum, with strong inwardly-curved projections above and below middle, edged posteriorly by a dark fuscous-brown line, which is strongly thickened to fill in these projections; cilia fuscous, between projecting crenulate lobules white. Hindwings with termen slightly rounded, crenulated as forewings; fuscous; a fine white transverse line edged anteriorly with blackish from two-thirds dorsum to two-thirds costa, toothed posteriorly in middle and at extremities; cilia as forewings but apices wholly white, on dorsum white. Under side of forewings as upper side but more whitish, and without basal markings and first line; of hindwings whitish with a bisinuate, reddish-fuscous, transverse, median line not



reaching dorsum, and a broad, pale-reddish, subterminal band, containing a large oval spot of dark-red mixed with dark-fuscous.

Type in Coll. Goldfinch. The lobulate termen of both wings is characteristic of the genus.

Western Australia: Kojareena (Waterhouse).

#### 150. HYPOGRAPHA ARISTARCHA.

Prout, *Gen. Insect.*, Oenochrom., p. 50.

♂, ♀. 48-52 mm. Head and thorax fuscous mixed with whitish; face not prominent but covered with rough hairs. Palpi  $1\frac{1}{4}$ ; second joint with loose spreading hairs beneath; fuscous mixed with whitish. Antennae fuscous; unipectinate in both sexes with apical fourth simple, pectinations in ♂ 6, in ♀  $1\frac{1}{2}$ . Abdomen grey, towards apex mixed with dark-fuscous; terminal fringe of third segment and sometimes middle of tuft white; under side with some brownish or purple-reddish irroration. Legs fuscous mixed with whitish. Forewings elongate-triangular, costa straight to near apex, apex pointed, termen rounded, oblique, deeply dentate or lobulate; fuscous; costal edge and a terminal suffusion beneath apex sometimes whitish; costa finely strigulated with blackish; markings blackish; a costal spot at one-third, with a spot in disc beneath it, and a third above one-third dorsum represent antemedian line; a slight, oblique, median, subcostal, discal mark; a spot on two-thirds costa giving rise to a rather broad, oblique, sinuate line to three-fifths dorsum, not denticulate; this is followed by a more slender bisinuate postmedian line, and this again by a similar but less distinct subterminal line; veins between last three lines dark-fuscous; a fine interrupted terminal line; cilia fuscous, between dentations whitish. Hindwings with termen rounded, dentate; fuscous, with fine indistinct darker median and postmedian lines; cilia fuscous, on apex and between apical dentations whitish. Under side of forewings without antemedian line; similar to upper side, but with more white suffusion; of hindwings grey, more whitish in median area, profusely strigulated with blackish; waved blackish antemedian and postmedian lines; a whitish dentate subterminal line interrupted sometimes by a median blackish blotch.

My material for this description consists of a fine pair, including the type, loaned by the National Museum, Melbourne, and a ♀ loaned by the South Australian Museum.

Victoria: Beaconsfield. South Australia: Mt. Lofty.

#### 151. HYPOGRAPHA PHLEGETONARIA.

Gn., *Lep.*, ix, p. 190, Pl. 19, f. 2.

♂, ♀. 38-42 mm. Head and thorax grey; face not prominent; but with some projecting hairs on lower edge. Palpi  $1\frac{1}{2}$ ; second joint shortly rough-haired beneath; grey. Antennae fuscous; in ♀ simple, in ♂ unipectinate, apical fourth simple, pectinations 5. Abdomen grey irrorated with fuscous, or fuscous, bases of second and third segments whitish. Legs fuscous mixed with whitish. Forewings triangular, costa straight or slightly sinuate, apex acute, termen rounded, slightly oblique, deeply dentate or lobulate; fuscous-grey; markings dark-fuscous; a spot on one-fourth costa with faint indications of an antemedian line; a median, subcostal, discal spot; very fine dentate postmedian and subterminal lines; an interrupted terminal line; a slight reddish irroration on dentations; cilia fuscous, between dentations white. Hindwings with termen rounded, dentate; colour and



cilia as forewings; fine, faintly darker, antemedian and postmedian lines. Under side of forewings without antemedian line; as forewings but dentate lines more distinct; some white suffusion at apex and beneath middle of termen; of hindwings grey, with a moderate, curved, dark-edged fascia from costa before to dorsum beyond middle, and a whitish subterminal line preceded by a dark-fuscous suffusion.

This description is based on two examples. Guenée's type was from Tasmania and appears to have had the markings more distinctly developed. The best proof of the distinctness of this species from the preceding lies in the different antennal structure.

New South Wales: Newcastle, Sydney, Katoomba. Tasmania.

#### Genus 21. SARCINODES.

Gn., *Lep.*, ix, p. 188; Prout, *Gen. Insect.*, *Oenochrom.*, p. 56.

Face with anterior cone of scales. Palpi moderately long, obliquely ascending; second joint thickened with loosely appressed hairs; terminal joint short, stout, obtuse, porrect. Antennae of ♂ unipectinate, towards apex simple. Thorax and abdomen stout; the former densely hairy beneath. Femora hairy. Tarsi strongly spinulose. Forewings with 5 from near upper angle of cell, 9 and 10 long-stalked, 9 anastomosing with 8, but extreme base of 9 not always developed (see remarks under *Monoctenia*), 11 free. Hindwings with 5 closely approximated, connate, or short-stalked with 6 from upper angle of cell, 7 from shortly above angle, 12 closely approximated to cell to beyond middle, thence diverging.

A development of *Oenochroma*, but sharply differentiated by the close approximation of 5 at origin to 6, especially in the hindwings. An Indo-Malayan genus of about ten species. Type, *S. carnearia* Gn. from India. It may be inferred that the two genera had a common ancestor in Southern Asia before the separation of the Australian continent, where it gave rise to *Monoctenia*, *Oenochroma*, etc. In Asia the more generalized forms died out, leaving only the more specialized *Sarcinodes*, which has invaded Australia from New Guinea in recent geological time.

#### 152. SARCINODES HOLZI.

Pagenst., *Jahrb. nassau. Ver. Naturk.*, xli, 1888, 167; *Sarcinodes subfulvida* Warr., *Novit. Zool.*, 1896, 280; *Sarcinodes compacta* Warr., *Novit. Zool.*, 1896, 355.

♀. 60 mm. Head, thorax, and abdomen pale-pinkish. Palpi  $2\frac{1}{2}$ ; pale pinkish with some grey irroration. Antennae pinkish, towards base mixed with dark-fuscous. Legs pinkish-grey; anterior pair grey. Forewings rather broadly triangular, costa nearly straight but slightly sinuate, apex pointed, slightly produced, termen moderately rounded; pale-pink; an interrupted brownish line from one-fifth costa to one-sixth dorsum, outwardly curved, dentate; a similar line from midcosta obliquely outwards, soon bent inwards and continued to one-third dorsum; a straight line of whitish dots on veins from costa just before apex to two-thirds dorsum; disc between lines suffused with brownish-ochreous, a similar broad suffusion on termen, the two confluent above middle; cilia reddish-brown. Hindwings with termen rounded; colour and markings as forewings, but without first line; a subterminal series of white dots. Under side paler; postmedian lines of fuscous dots on both wings; succeeded by more or less brown suffusion, especially on hindwings.



I am indebted to Mr. L. B. Prout for identifying this species and giving me the references.

North Queensland: Kuranda, near Cairns, in November and April; two specimens received from Mr. F. P. Dodd. Also from New Guinea and Amboyna.

Genus 22. MACROCTENIA, n. gen.

μακροκτενιος, long-combed.

Face smooth, rounded, slightly projecting. Palpi moderate, porrect; second joint thickened with short, loosely appressed hairs; terminal joint rather long, cylindrical, obtuse. Antennae long (three-fourths of forewings); in ♂ unipectinate, towards apex simple, pectinations long. Thorax stout, under side densely hairy. Femora hairy. Posterior tibiae with two pairs of spurs. Tarsi spinulose. Forewings with 11 free, 10 and 9 long-stalked from cell, 9 anastomosing with 8 soon after origin, forming a long narrow areole. Hindwings with 3 and 4 connate, 5 from only slightly above middle of cell, 6 and 7 connate, 12 anastomosing with cell from one-third to two-thirds, gradually diverging.

Similar in neuration to *Lissomma*, but vein 11 of forewings is free. I do not think it is nearly related to that genus, but to *Monoctenia*, the anastomosis of 12 of hindwings with cell being independently developed as in *Gerusia*. The unusually long antennae are a peculiar character.

153. MACROCTENIA EPAENETA, n. sp.

ἐπαινετος, praiseworthy.

♂. 57 mm. Head and thorax whitish-ochreous. Palpi 1½; whitish-ochreous. Antennae pale-ochreous; pectinations in ♂ 8, apical fourth simple. Abdomen ochreous-whitish, on dorsum pinkish-tinged. Legs ochreous-whitish; anterior pair pinkish-tinged. Forewings elongate-triangular, costa straight, apex pointed, termen slightly sinuate, oblique; whitish-ochreous somewhat brownish-tinged; a very slightly curved ochreous line, pale edged anteriorly, from three-fourths dorsum towards, but not reaching, apex; a few sparse fuscous strigulae mostly in terminal area; cilia ochreous. Hindwings with apex rounded, termen straight; pink, except tornal area which is coloured as forewings; cilia ochreous.

Type in Coll. Lyell.

Western Australia: Busselton in April; one specimen received from Mr. J. K. Ewers.

Genus 23. MONOCTENIA.

Gn., *Lep.*, ix, p. 183; Prout, *Gen. Insect.*, Oenochrom., p. 39.

Face smooth or slightly rough-scaled, flat, or with slight rounded prominence. Tongue well developed. Palpi short, porrect; second joint thickened with loosely appressed hairs; terminal joint short, stout, obtuse. Antennae of ♂ unipectinate, towards apex simple, pectinations long. Thorax densely hairy beneath. Femora hairy. Tarsi strongly spinulose. Forewings with 11 arising separately and free, 10 and 9 long stalked from cell, 9 anastomosing with 8 to form a long narrow areole, but sometimes the connection formed by the origin of 9 from 10 fails to develop, in this case the areole is lost by separation, and 9 appears to be stalked with 7, 8. Hindwings with 5 strongly approximated to 6 at origin (about three times as far from 4 as from 6), 6 and 7 separate but approximated at origin, 12 approximated to middle part of cell, diverging at about two-thirds.

Type, *M. falernaria* Gn.



A small genus readily distinguished from *Oenochroma* by the origin of 5 of hindwings, an important character. The species are nearly allied, the last three being extremely similar.

- |   |                       |     |
|---|-----------------------|-----|
| 1. Hindwings with basal half white .....                      | <i>postcarneata</i> . | 154 |
| Hindwings not white towards base .....                        |                       | 2   |
| 2. Forewings narrow, breadth much less than half length ..... |                       | 3   |
| Forewings broad, breadth about half length .....              | <i>falernaria</i> .   | 157 |
| 3. Wings with termen dentate .....                            | <i>smerintharia</i> . | 155 |
| Wings with termen not dentate .....                           | <i>eximia</i> .       | 156 |

#### 154. MONOCTENIA POSTCARNEATA.

*Oenochroma postcarneata* Prout, *Gen. Insect.*, *Oenochrom.*, p. 42.

♀. 29 mm. Head and thorax whitish-ochreous. Palpi 2; whitish irrorated with pinkish. Antennae grey-whitish. Abdomen ochreous-whitish, under surface sparsely irrorated with fuscous. Legs ochreous-whitish; anterior pair pinkish-tinged. Forewings triangular, costa sinuate, apex acute, termen bowed, slightly oblique; whitish-ochreous faintly pinkish-tinged; a transverse row of slightly darker dots at three-fourths; cilia concolorous. Hindwings with termen gently rounded; whitish; a short transverse fuscous line in middle of disc at three-fifths; beyond this a broad terminal pinkish suffusion containing a transversely oval fuscous blotch in middle; cilia whitish with four or five fuscous bars opposite veins. Under side of forewings ochreous-whitish with a few fuscous scales and a pinkish suffusion before mid-termen; of hindwings like upper side, but with a few fuscous scales, and terminal pinkish suffusion restricted to neighbourhood of fuscous blotch.

Western Australia: Perth. Described from the type in the British Museum.

#### 155. MONOCTENIA SMERINTHARIA.

Feld., *Reise Nov.*, 1875, Pl. 124, f. 18, 19.

♂, ♀. 62-66 mm. Head grey or ochreous-grey; face purple-fuscous or reddish-fuscous. Palpi 1½, subascending; pale-ochreous densely irrorated with fuscous, reddish on external surface. Antennae pale-reddish or pale-ochreous; pectinations in ♂ 8, pale-ochreous. Thorax grey; pectus purple-reddish. Abdomen grey or ochreous-grey; tuft purple-reddish. Legs pale ochreous mixed with purple-reddish. Forewings elongate-triangular, rather narrow, costa straight or slightly sinuate, apex acute, termen much longer than dorsum, strongly bowed beneath apex, dentate; grey-whitish or pale-reddish suffused with purple-grey; a pale-reddish sometimes dentate line from beneath costa before apex to dorsum at three-fifths or two-thirds, parallel to termen, sometimes preceded by a blackish shade, broad towards dorsum, becoming narrower towards costa, and followed by some fuscous irroration; cilia reddish, apices between dentations ochreous, darker on dentations. Hindwings with apex rounded, termen nearly straight, dentate; pale purple-reddish; sometimes a large fuscous suffusion towards tornus; a pale subterminal line becoming indistinct towards costa; cilia as forewings.

Victoria: Melbourne, Mount Korong. There are very few known examples of this species.

#### 156. MONOCTENIA EXIMIA.

Low., *Trans. Roy. Soc. S. Aust.*, 1892, 7.—*Monoctenia calladelphe* Low., *ibid.*, p. 7.



♂. 65 mm. Head, thorax, abdomen, and legs pale-rosy. Palpi 1½; pale-rosy. Antennae pale-ochreous; pectinations in ♂ 12, apical third simple. Forewings narrowly triangular, costa straight, apex obtusely pointed, termen bowed above middle, strongly oblique; pale-rosy without markings; cilia rosy-ochreous. Hindwings with termen rounded; colour and cilia as forewings.

A good and distinct species, much more narrowly winged than *falernaria*. My description is from an example which had been compared with the type of *calladelpha* by Mr. N. B. Tindale, who informs me that *eximia* is the same species. It appears to be a variety differing only in the presence of a pale costal streak.

South Australia: Adelaide, Port Lincoln.

#### 157. MONOCTENIA FALERNARIA.

Gn., *Lep.*, ix, p. 184; Meyr., PROC. LINN. SOC. N.S.W., 1889, 1208; *Monoctenia fraternaria* Gn., *Lep.*, p. 184, Pl. 7, f. 3.

♂. 70 mm. ♀. 76-82 mm. Head pale-rosy; face dark-crimson. Palpi 1; crimson. Antennae pale-ochreous; pectinations in ♂ 12. Thorax, abdomen and legs pale-rosy, sometimes ochreous-tinged. Forewings broadly triangular, costa nearly straight, apex acute, slightly produced, termen sinuate beneath apex, strongly bowed above middle, oblique, slightly irregular; pale-rosy, sometimes ochreous-tinged; a slightly darker triangular area, sometimes outlined with fuscous, extending on costa from middle to four-fifths, and extending to beneath middle of disc, sometimes connected by one or more fuscous spots to dorsum beyond middle; cilia concolorous or fuscous. Hindwings with termen slightly rounded; colour and cilia as forewings; a suffused, pale-fuscous, median, transverse line.

New South Wales: Bathurst. Victoria: Melbourne, Gisborne, Lorne. Tasmania: Hobart. South Australia: Adelaide, Port Lincoln. Western Australia: Denmark.

#### Genus 24. PHALLARIA.

Gn., *Lep.*, ix, p. 186; Meyr., PROC. LINN. SOC. N.S.W., 1889, 1203; Prout, *Gen. Insect.*, Oenochrom., p. 43.

Face with slight rounded prominence, slightly rough-haired. Tongue strongly developed. Palpi moderate, porrect; second joint thickened with loosely appressed scales above and beneath; terminal joint moderate, cylindrical, obtuse. Antennae rather long (more than half), bipectinate to apex in both sexes, pectinations in ♂ moderately long, in ♀ short. Thorax stout; densely hairy beneath. Femora hairy. Tarsi strongly spinulose. Forewings with 11 free, 9 and 10 long-stalked from cell, 9 anastomosing with 8 to form a long narrow areole, but sometimes the connecting portion of 9 between 10 and 8 fails to develop. Hindwings with 3 and 4 widely separate, 3 arising from midway between 2 and 4, 5 from middle of cell, 6 and 7 separate but approximated at origin, 12 approximated to cell from one-fourth to three-fourths.

Allied to *Monoctenia*, differing in the longer antennae, bipectinated in both sexes. Monotypical.

#### 158. PHALLARIA OPHIUSARIA.

Gn., *Lep.*, ix, 1858, 186; Meyr., PROC. LINN. SOC. N.S.W., 1889, 1203.—*Oenochroma quaternaria* H-Sch., *Ausser. Schmet.*, i, 1858, p. 84, Pl. 95, f. 541.—*Smerinthus ? wayii* Tepp., *Trans. Roy. Soc. S. Aust.*, 1882, 29.

New South Wales: Sydney, Bathurst. Victoria: Geelong, Beaconsfield, Narracan, Warragul. South Australia: Mt. Lofty.





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