

ASIATIC *TORTRICIDÆ*.

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[Continued from vol. v. p. 490.]

CARPOSINA, H.-S.

912 (3). *Carposina niponensis*, sp. n.

Antennæ (♂) biciliate (3); dirty brownish white. *Palpi* whitish, the median joint shaded externally with fuscous, the terminal broadly annulate with fuscous at its base. *Head*

and *thorax* dirty brownish white. *Fore wings* dirty brownish white; with a short triangular basal patch, much widened on the costa, pale brownish fuscous, with a darker fuscous spot of raised scales near the lower extremity of its outer edge; four or five ill-defined pale brownish fuscous shade-spots along the costa, of which one only is before the middle, from this a diffused shade of scattered fuscous scaling slopes outward to the lower angle of the cell, where there is a small raised spot, thence a similar diffused shade, much raised at the upper angle of the cell, is continued to the two outer costal spots; a broken shade-line is indicated around the apex and termen; cilia brownish grey. *Exp. al.* 16 mm. *Hind wings* grey; cilia brownish grey. *Abdomen* brownish grey. *Legs* whitish, with hind tarsal shade-rings.

Type, ♂ (70601) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886). Unique.

The colouring of this species is very obscure and ill-defined, and although it is obviously distinct I should scarcely have thought it worthy of description had it not been desirable to indicate this interesting geographical extension of the genus.

✓ PROPEDESIS, gen. nov.

(προπήδῃσις = a springing forward.)

Type Propedesis excisa, Wlsm.

Antennæ (♀) simple. *Labial palpi* projecting nearly twice the length of the head beyond it; terminal joint short, median joint somewhat triangular owing to upstanding scales above at the middle and depressed scales below at its apex. *Head* densely clothed above. *Thorax* smooth. *Fore wings* narrow, elongate; costa slightly arched near the base, straight beyond; termen very oblique, sinuate. *Neuration*, 12 veins; 2 from very near angle of cell; 3 and 4 closely approximate at angle of cell; 7 to termen; 8 and 9 stalked, 8 to a little above termen. *Hind wings* with the costa straight, apex produced, termen sinuate, flexus rounded, median vein with long loose hairs above. *Neuration*, 6 veins; 3 and 4 stalked. *Abdomen* smooth. *Legs* with slight projecting scales at hinder extremity of tibiæ.

The genus is closely allied to *Carposina*, H.-S., from which it is distinguishable only by the stalking of veins 8 and 9 of the fore wings and the somewhat more produced apex of the hind wings. The male will probably have biciliate antennæ and short palpi.

912 (4). *Propedesis excisa*, sp. n.

Antennæ dirty white, annulate with fuscous towards the base. *Palpi* white, black beneath and at the base. *Head* and *thorax* white. *Fore wings* with the termen very oblique, strongly sinuate beneath the produced apex; white, dusted with greyish fuscous, the markings dark greyish fuscous; a triangular basal patch, wider on the costa than on the dorsum, is followed by a costal spot before the middle, succeeded by three smaller ones beyond the middle; an oblique patch at the outer end of the cell is parallel to the outer edge of the basal patch, it reaches down to the fold and upward nearly to the costal spot, and is accompanied by tufts of raised scales, as is also the outer edge of the basal patch itself; there is a series of spots along the termen, with a parallel shade-line faintly indicated before them; cilia brownish cinereous. *Exp. al.* 20 mm. *Hind wings* with strongly produced apex, the termen more deeply excised than in the fore wings; brownish grey; cilia brownish cinereous. *Abdomen* brownish grey. *Legs* dirty whitish.

Type, ♀ (70602) Mus. Wlsm.

Hab. JAPAN (Pryer, 1886). Unique.

912 (5). *Propedesis japonica*, sp. n.

Antennæ dirty white, very faintly annulate. *Palpi* whitish, shaded externally with greyish fuscous. *Head* and *thorax* whitish, tinged with greenish grey. *Fore wings* greenish white, sparsely dusted with olive-grey, with a triangular patch of pale olivaceous grey at the base, wider on the costa than on the dorsum, its outer edge consisting of raised scales; a slight olive-grey shade-spot on the costa before the middle, followed by three others beyond it; an oblique fuscous streak at the end of the cell, consisting of raised scales, and preceded by other tufts of raised scales (white dusted with fuscous), one at the upper edge of the cell, one resting on the middle of the fold, another preceding it below the fold; the termen shows a faint indication of greyish marginal spots preceded by a parallel greyish shade; cilia pale cinereous. *Exp. al.* 20 mm. *Hind wings* pale rosy grey; cilia greyish cinereous. *Abdomen* cinereous. *Legs* whitish.

Type, ♀ (70603) Mus. Wlsm.

Hab. JAPAN (Pryer, 1886). Unique.

This species differs from *excisa* in the different outline of the wing as well as in the markings; both in the fore and hind wings the apex is less produced and less acute, the termen being only very slightly sinuate.

RHYACIONIA, Hb.

Type *Tortrix buoliana*, Schiff. (Stph. 1834).

915. *Rhyacionia duplana*, Hb.

Retinia duplana, Stgr. & Wk. Cat. Lp. Eur. 246. No. 915 (1871)¹;
Fern. Tr. Am. Ent. Soc. X. 27. No. 158 (1882)².

Hab. EUROPE¹. JAPAN (*Pryer*, 1886)—HONDO—Yokohama (*Manley*, 1888). UNITED STATES—Oregon².

919. *Rhyacionia turionana*, Hb.

Retinia turionana, Stgr. & Wk. Cat. Lp. Eur. 246. No. 919 (1871)¹;
Fern. Tr. Am. Ent. Soc. X. 27. No. 157 (1882)².

Hab. EUROPE¹. JAPAN (*Pryer*, 1886). UNITED STATES—Nevada².

921. *Rhyacionia buoliana*, Schiff.

Retinia buoliana, Stgr. & Wk. Cat. Lp. Eur. 246. No. 921 (1871)¹.

Hab. EUROPE¹. SIBERIA¹. COREA—Gensan, VI. 1886 (*Leech*).

923 (1). *Rhyacionia retiferana*, Wk.

*Retinia *margarotana*, Hein. Schm. Deutsch. Tortr. 95-6. No. 168 (1863). *Retinia retiferana*, Wk. Zts. Ent. Bresl. (n. s.) VII. 73 (1879). *Retinia *margarotana*, Brt. Ent. Mo. Mag. XXVI. 49 (1890); Hdgn. Ent. XXIII. 119 (1890). *Retinia retiferana*, Bst. Ent. Mo. Mag. XXIX. 113-4 (1893); Rag. Ann. Soc. Ent. Fr. LXIII. 200. No. 923 bis (1894).

Hab. EUROPE. JAPAN (*Pryer*, 1886).

EXARTEMA, Clem.

924 (1). *Exartema castaneanum*, sp. n.

Antennæ brownish grey. *Palpi* whitish ochreous, with two fuscous spots on their outer sides. *Head* and *thorax* brownish grey, the tegulæ and patagia paler. *Fore wings* rich chestnut, with shining leaden grey markings narrowly outlined with pale ochreous and some brownish fuscous shades; a basal patch extending to one-third is mottled with brownish fuscous, leaden grey, and chestnut, its outer edge straight, but with a slight outward angle below the costa, and bounded by a leaden grey band narrowly outlined with pale ochreous; a leaden grey patch at the tornus sends two branches inwards from its upper extremity, the upper one

moderately straight, the lower one angulated downward at its middle, all narrowly outlined with ochreous; there are five pairs of outwardly oblique pale ochreous costal streaks beyond the middle, alternating with brownish fuscous, the first pair emitting a sinuate leaden grey line which reaches the termen above the middle; cilia brownish ochreous, with a fuscous spot at the apex and another on the middle of the termen. *Exp. al.* 15–17 mm. *Hind wings* greyish brown; cilia pale ochreous, a dark dividing line running through them near their base. *Abdomen* greyish brown. *Legs* ochreous, shaded and banded with greyish brown.

Type, ♂ (60792, Kiusiu); ♀ (60793) Mus. Wlsm.

Hab. COREA—Gensan, VII.–IX. 1887 (*Ito*). JAPAN—Kiusiu (*Leech*, 1890). Five specimens.

Allied to the American *Exartema ferrugineanum*, Riley, but the only specimen I have of this differs decidedly in the position of the first geminated costal streak beyond the middle, the leaden line extending to the termen being much shorter and coming from the second instead of from the first pair.

924 (2). *Exartema velutinum*, sp. n.

Antennæ fuscous. *Palpi* dirty whitish ochreous. *Head* and *thorax* fuscous. *Fore wings* dark brownish fuscous, bright reddish ferruginous towards the apex and below the middle of the termen, with a pale brownish olivaceous ochreous patch on the middle of the dorsum, mottled on the basal patch and on the rather oblique median band with steel-blue; with seven pairs of pale whitish ochreous costal streaklets, of which two only are before the middle, the first pair beyond the middle giving out a sinuous steel-blue line to above the middle of the termen; a steel-blue patch at the tornus sends inward two branches from its upper extremity, forming the blue mottling on the dark band; cilia ochreous, tessellated with fuscous, a fuscous line along their base. *Exp. al.* 15 mm. *Hind wings* rather deeply emarginate below the lobe in ♂; greyish brown; cilia pale cinereous, a dark shade-line near their base. *Abdomen* greyish brown. *Legs* greyish, banded with pale cinereous.

Type, ♂ (60459, Mupin); ♀ (60796) Mus. Wlsm.

Hab. W. CHINA—Mupin, 21 V., 28 V. 1890 (*Leech*). COREA—Gensan, VI. 1886 (*Leech*), VII.–IX. 1887 (*Ito*). JAPAN (*Pryer*, 1886)—Kiusiu (*Leech*, 1890)—Satsuma, V. 1886 (*Leech*). Eight specimens.

924 (3). *Exartema transversanum*, Chr. ✓

Penthina transversana, Chr. Bull. Soc. Imp. Nat. Mosc. LVI. 75-7. No. 108 (1881)¹; *sep.* 163-5 (1882)¹.

Hab. AMUR—Pompejefka, VII.¹; Wladiwostok¹, 15 VII., 3-4 VIII. 1877 (*Christoph*). COREA—Gensan, VI. 1886 (*Leech*). CHINA—Chang Yang, 4000-6000 feet (*Pratt*, 1886). JAPAN (*Pryer*, 1886)—YESSO—Hakodate, VIII. 1886 (*Leech*); HONDO—Tsuruga, VII. 1886 (*Leech*).

924 (4). *Exartema japonicum*, sp. n.

Antennæ cinereous. *Palpi* whitish cinereous. *Head* cinereous. *Thorax* mixed whitish cinereous and olive-brown. *Fore wings* shining whitish cinereous, with olive-brown streaks and blotches; the first series bounding a much reticulated basal patch, wider on the dorsum than on the costa, and containing an admixture of steel-grey scales; the second series forming a moderately straight transverse fascia in the middle of the wing, wider on the dorsum than on the costa and bulging outwards in the middle in two large irregular excrescences, broken up with dark fuscous and shining steel-grey scaling; an olive-brown spot before the tornus is more or less connected by a pale olivaceous shade with an elongate oblique olivaceous patch above it, which again is connected with some oblique streaks of the same colour from the costa, alternating with creamy white geminated streaks, each divided by steel-grey lines which run together to the middle of the termen; the apex is olive-brown; cilia pale whitish ochreous, with an olive-brown line along their base; the whole of the paler portions of the wing are rendered more or less lustrous by the admixture of steel-grey scaling. *Exp. al.* 20 mm. *Hind wings* dark brown; cilia shining whitish cinereous, with a dark line through them near their base. *Abdomen* greyish brown, anal tuft cinereous. *Legs* cinereous.

Type, ♂ (70537); ♀ (60392) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886)—HONDO—Tsuruga, VII. 1886 (*Leech*). Four specimens.

924 (5). *Exartema Pryerianum*, sp. n. ✓

Antennæ brownish cinereous. *Palpi* pale brownish cinereous, with some fuscous scales. *Head* and *thorax* brownish fuscous, mixed with brownish cinereous. *Fore wings* brownish cinereous, much shaded across the middle and on the basal patch, and sprinkled toward the apex with brownish fuscous; a reduplicated narrow leaden grey band at one-

third, narrowly outlined with brownish cinereous, ends in two pairs of brownish cinereous costal streaklets, and from a little beyond the middle a similar band tends obliquely outward from costa to tornus, sometimes broken about its middle, where it sends a branch obliquely inward to the dorsum; the shape of this band seems to be somewhat variable, but at its upper extremity is a pair of costal streaklets, and these are succeeded by three other pairs before the apex, which tend to converge upon a sinuate leaden grey line running toward the middle of the termen; cilia pale brownish cinereous, shaded along their base and on their outer half with fuscous. *Exp. al.* 19 mm. *Hind wings* dark greyish brown; cilia pale brownish cinereous, with a shade-line near their base. *Abdomen* greyish brown. *Legs* pale cinereous, with slightly spotted tarsi.

Type, ♂ (70542); ♀ (70546) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886)—HONDO—Oiwake (*Pryer*, 1885). Four specimens.

924 (6). *Exartema fasciatanum*, Clem. ✓

Exartema fasciatana, Clem. Pr. Ac. Nat. Sc. Phil. XII. 357 (1860)¹.

Sciaphila decisana, Wkr. Cat. Lp. Ins. B. M. XXVIII. 340-1 (1863)².

Exartema fasciatana, Wkr. Cat. Lp. Ins. B. M. XXX. 994 (1864)³.

Sericoris fasciatana, Clem. Pr. Ent. Soc. Phil. V. 134 (1865)⁴. *Ex-*

artema albofasciatum, Z. Verh. ZB. Ges. Wien, XXV. (1875) Abh.

272-3 (1875)⁵. *Exartema fasciatana*, Z. Verh. ZB. Ges. Wien, XXV.

(1875) Abh. 273 (1875)⁶. *Eccopsis fasciatana*, Fern. Tr. Am. Ent.

Soc. X. 30. No. 177 (1882)⁷; Mft. Can. Ent. XIX. 88 (1887)⁸.

Hab. JAPAN (*Pryer*, 1886)—HONDO—Yokohama (*Manley*, 1888). CANADA—Ontario⁸. UNITED STATES¹⁻⁴—Maine⁷, Massachusetts⁷, New York⁷, Pennsylvania⁷, Maryland (*Mus. de Joannis*), Ohio⁵, North Carolina (*Morrison*), Illinois⁵.

924 (7). *Exartema semicremanum*, Chr.

† *Penthinea semicremana*, Chr. Bull. Soc. Imp. Nat. Mosc. LVI. 77-8.

No. 109 (1881)¹; *sep.* 165-6 (1882)¹. *Penthina semicremana*, Rag.

Ann. Soc. Ent. Fr. LXIII. 203. No. 949 *bis* (1894)².

Hab. AMUR—Pompejefka, VII.¹, 13 VII. 1876 (*Christoph*). JAPAN—YESSO (*Pryer*, 1882).

OLETHREUTES.

924 (8). *Olethreutes arcuella*, L.

Penthina arcuella, Stgr. & Wk. Cat. Lp. Eur. 249. No. 980 (1871)¹;

Stgr. Hor. Soc. Ent. Ross. XV. 250 (1879)². *Eucosma arcuella*,

Meyr. HB. Br. Lp. 465 (1895)³.

Hab. EUROPE¹. ASIATIC TURKEY — KHUDAYENDIKIAR—

Brussa, VI.² SIBERIA². COREA — Gensan, VI. 1886 (Leech). JAPAN²—HONDO—Oiwake, VI. 1885, VI.—VII. 1887 (Pryer).

The specimens of this species from Corea and Japan differ from our English form in their larger size and paler colouring on the underside, but precisely correspond in their markings. The males all have a small hanging appendage near the base of the limbus in the hind wings, a character hitherto confined to the genera *Exartema*, Clem., and *Cymolomia*, Ld. The discovery of this character in Japanese specimens caused me to re-examine carefully a series of British specimens of *arcuella*, which has been placed by different European authors in *Penthina*, Tr., and *Sericoris*, Tr. It was at once apparent that all the males in the series possessed a very small rudimentary appendage, scarcely noticeable unless special attention had been called to it. The stronger development of this character in Japanese specimens is scarcely sufficient to justify their description as a distinct species, especially as I find German specimens of intermediate size and decidedly paler on the underside than our British examples.

Meyrick, whose attention had been called to the existence of the lobe, wrote (HB. Br. Lp. 465) that this was so rudimentary that it appeared insufficient for generic separation. In this I am unable to agree with him, for it is certainly a structural character, corresponding with that which was relied upon by Clemens when describing the genus *Exartema*.

The question is one of degree, but it may fairly be argued that the possession of a structural character rather than the mere degree of its development is the true test of generic rank; and Meyrick has recognized this principle very forcibly in including *Ptycholoma*, Stph., and *Lozotænia*, Stph., in the genus *Cacæcia*, Hb., the only cause of separation by the older authors having apparently been the inferior development of the costal fold.

If Meyrick is justified in placing *arcuella* in the same genus as many other species which possess no limbal fold or lobe, it follows that the Japanese form (specially inseparable, as I think, from *arcuella*) would fall into a different genus through the slightly greater development of the limbal lobe, unless he is prepared to include with it *Exartema*, *Eccopsis*, &c.

Clemens, in describing *Exartema*, clearly refers to the hind margin being deeply and sharply excised opposite to the median nervules. He described five species: the first two only, viz. *nitidana* and *permundana*, possess this character; the other three species, *versicolorana*, *inornatana*, and *fasciata*, have the dorsum evenly rounded beyond the flexus,

although there is an excavation on the limbus as well as the tubular lobe at the base. In the outline of the wing these three species agree with *Cymolomia*, Ld., rather than with *Olethreutes*, which possesses the lobe without any excavation of the limbus, but the American species differ from *Cymolomia* in the tubular structure of the lobe. Thus we have in this group four published genera, which can be distinguished by structural differences:—

1. ECCOPSIS, Z.—Limbus rolled at base, without lobe, with strongly angular limbal excavation and deep dorsal excavation beyond the flexus.
2. EXARTEMA, Clem.—With partially free tubular lobe from base of limbus, moderately excised limbal margin, and excised dorsum beyond the flexus.
3. CYMLOMIA, Ld.—Limbus rolled at the base, without free lobe; limbus excised, dorsum not noticeably excised.
4. OLETHREUTES, Hb.—Limbus rolled, with slightly developed lobe; limbus and dorsum not excised.

924 (9). *Olethreutes notata*, sp. n.

Antennæ cinereous, basal joint yellow-ochreous. *Palpi* pale whitish ochreous, shaded externally with fuscous. *Head* yellow-ochreous, shaded with fuscous. *Thorax* bright yellow-ochreous, mottled with fuscous. *Fore wings* bright yellow-ochreous, reticulated on the basal half and deeply suffused on the outer half with blackish fuscous, and with numerous spots and short cross-bars of bright shining steel-blue; the spots for the most part being evenly distributed over the basal half, and with three bars and some spots on the outer half, one below the termen at the commencement of the apical third, one above the tornus, and one within and below the apex, the two outer moderately straight, the inner slightly oblique, except where the deep outer shade touches the costa immediately beyond the middle; the edges of the wing are uniformly bright yellow-ochreous, mottled and spotted with dark fuscous; cilia greyish fuscous, with a broad pale whitish ochreous interruption below the apex, a black line along their base. *Exp. al.* 19–20 mm. *Hind wings* dark brown; cilia pale whitish ochreous, a dark line running through them near their base. *Abdomen* brownish. *Legs* grey.

Type, ♂ (70014); ♀ (70016) Mus. Wlsm.

Hab. JAPAN—Yesso (*Pryer*, 1882). Six specimens.

This species has a very rudimentary excrescence near the base of the limbus of the hind wings, scarcely more than a thickening of the cuticle on the margin itself, in this respect

agreeing with the European form of *arcuella* rather than with *Eccopsis*, in which this character is much more strongly developed.

PHÆCADOPHORA, gen. nov. ✓

(φακός = a woolly shoe; φέρειν = to carry.)

Type, ♂ ♀, *Phæcadophora fimbriata*, Wlsm.

Antennæ (♂) slightly ciliate. *Palpi* (♂) short, projecting only the length of the head beyond it; terminal joint very short, almost concealed in the strong tuft above and below the median joint: ♀ longer than the ♂, more porrect, terminal joint more apparent and slightly depressed. *Head* with a strong erect crest. *Thorax* with a slightly erect tuft posteriorly. *Fore wings* narrow, elongate, costa gently arched, ♂ without a costal fold; apex acute or abruptly angulated; termen straight or slightly impressed, not convex; tornus rounded, dorsum straight. *Neuration*, 12 veins, all separate; 2 from middle third of cell; 7 to termen; 10 not nearer to 11 than 9. *Hind wings* much broader than the fore wings, more or less trapezoidal, apex rounded, termen slightly indented below it; ♂ with a strong pencil of hairs near the limbus on the upperside and a fringe of long hairs on the underside between the branches of vein 1. *Neuration*, 8 veins; 3 and 4 connate; 5 bent over to near origin of 4; 6 and 7 separate but parallel and closely approximate at their base. *Legs*, hind tibiæ and tarsi strongly clothed above with long tufts of woolly scales.

This genus differs from *Phæcasiophora*, Grt., in its narrower fore wings and in the hind tarsal joints as well as the tibiæ being clothed with thick hair-tufts, as well as in the more strongly developed fringes of hairs above and below the hind wings near the limbus.

924 (10). *Phæcadophora fimbriata*, sp. n. ✓

Antennæ and *palpi* tawny cinereous. *Head* and *thorax* dark tawny vinous red; tegulæ pale cinereous, shaded with reddish grey, with a strong raised tuft of vinous red scales on the thorax posteriorly. *Fore wings* whitish stone-colour, thickly and slenderly streaked throughout with rosy pink and olive-brown; costa with oblique striæ throughout its length, a pair before the apex turning downwards and meeting the end of the oblique streak which precedes them; at the end of the cell are a few blackish scales, and along the dorsum a conspicuous dark band of tawny brownish, bluish fuscous on the extreme margin, with a blackish brown line

running along its middle and bent obliquely upwards at two-thirds from the base, where it is bounded on each side by a narrow margin of the pale ground-colour of the wing, running to a point at the lower angle of the cell, the upper edge of this dorsal band is somewhat waved, a slight bulge occurring before the middle of the wing, its upper edge carrying a reduplication of the blackish brown central line; about the tornus the dorsal band is continued after a slight interruption, and here also it contains some blackish brown lines; an elongate olive-brown shade lies below the outer half of the discal cell, with some lines of the pale ground-colour running through it; above the tornus is a small shining whitish ocelloid spot, tinged with rosy pink scales immediately above the angle; cilia beautifully mottled with olive-brown, silvery whitish, greyish fuscous, and rosy pink, the greyish fuscous being at their tips on the middle of the termen, also at the extreme apex and at the tornus, the rosy pink coming above and below the middle and also on the outer half of the cilia; the reddish brown is situated on the basal half of the cilia on the upper half of the margin, and the silvery whitish is immediately below it in a small spot also on the basal half of the cilia. *Exp. al.* 20 mm. *Hind wings* dark brown, on the upper surface of vein 2 is a distinct fringe of brownish grey hairs; cilia shining whitish, with a dark line running through them near their base. *Abdomen* brownish grey. *Legs* greyish white, clouded with greyish fuscous.

Type, ♂ (70257, Japan); ♀ (70249) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886)—*Kiusiu* (*Leech*, 1890). ASSAM—Margherita (*Doherty*, 1889). E. PEGU—*KAREN HILLS*—Thandsung, 4000 ft. (*Doherty*, 1890). Twenty-four specimens.

This description is taken from a male in beautiful condition, which exhibits some differences from others in the series. I find that in one variety (40124) the longitudinal streaks are more distinctly carried through the wing and there is more olive-brown alternating with longitudinal lines of fuscous, the rich rosy tint being chiefly confined to the space below the costa, especially in a long streak beneath the outer half; the black scales at the end of the cell are almost obsolete, and the cilia, although they exhibit somewhat the same pattern, are not so rich in colouring. It is evidently a variable species.

924 (11). *Phæcadophora* (?) *acutana*, sp. n.

Antennæ pale stone-grey, faintly spotted above. *Palpi* long, porrect, extending twice the length of the head beyond

it, thickly clothed to the base of the exposed terminal joint, above and beneath; light stone-grey. *Head* light stone-grey. *Thorax* pale stone-grey; tegulæ with two brownish spots. *Fore wings* elongate, apex slightly produced, termen slightly concave, scarcely oblique, angulated at the extremity of vein 3, thence very oblique to the dorsum, which is straight; stone-white, streaked throughout with pale olive-brown; a series of short oblique streaklets along the costa, olive-brown mixed with brownish fuscous scales; an olive-brown spot at the apex is followed by a greyish fuscous spot at the base of the cilia immediately below it; a small patch of greyish fuscous at the base of the dorsum, followed by some scattered specks of the same colour, especially along the lower half of the wing to the tornus, and a small streak of brownish fuscous scales at the angle of the termen on vein 3; cilia shining stone-white, inclining to olivaceous about the tornus. *Exp. al.* 21 mm. *Hind wings* brownish fuscous, costa whitish; cilia greyish fuscous, a dark line running through them near their base. *Abdomen* greyish fuscous. *Legs* stone-white, yellowish white on their underside; hind tarsal joints somewhat densely clothed, but not so thickly as in the male of the allied species *fimbriata*.

Type, ♀ (60191) Mus. Wlsm.

Hab. JAPAN — *KIUSIU* — Satsuma, V. 1886 (Leech).
Unique.

I should have regarded this as a variety of *fimbriata* had it not been for its much longer palpi and the absence of the dark dorsal band. The male is at present unknown, but the generic determination is almost certainly correct.

924 (12). *Phæcadophora* (?) *divisa*, sp. n.

Antennæ, *palpi*, and *head* cinereous. *Thorax* mixed greyish cinereous and dark reddish fuscous. *Fore wings* with the dorsal half pale cinereous, slightly mottled with greyish fuscous, the costal half dark reddish fuscous; the colour on the costal half extends to the fold at the base, is slightly indented before the middle, and diminishes obliquely from about the lower angle of the cell to the apex; along the extreme costa is a series of very small greyish cinereous geminated dots, with a slight tawny gloss, connected with the three pairs which precede the pair nearest to the apex; on the pale half of the wing is an oblique dash from the dorsum before the tornus, pale chestnut-brown, containing five or six short blackish fuscous transverse dashes; at its upper end this streak is connected with a brownish fuscous

spot, about the middle of the termen, which sends a dark shade through the whitish ochreous cilia; below this spot the space within the tornus inclines to whitish grey, and above it the triangular space between the dark costal shade and the upper half of the termen is white, a narrow dark line running around the termen at the base of the cilia; on the underside the geminated streaks are distinctly visible on the outer half of the costa. *Exp. al.* 22 mm. *Hind wings* dark greyish fuscous; cilia tipped with greyish. *Abdomen* dark greyish fuscous. *Legs* cinereous, clouded with fuscous on the hind tibiæ and tarsi.

Type, ♀ (40228) Mus. Wlsm.

Hab. ASSAM—NAGA HILLS—Gologhat (*Doherty*, 1890). Unique.

The termen of the fore wings in this species differs from that of *acutana* in not being more distinctly impressed below the apex than in the typical species. The ♂ is unknown, but it will probably be found to be congeneric with *fimbriata*.

924 (13). *Phæcadophora* (?) *ochracea*, sp. n.

Antennæ cinereous. *Palpi* whitish ochreous, the fringes at the end of the median joint and the terminal joint purplish fuscous. *Head* fuscous. *Thorax* cinereous. *Fore wings* with the termen slightly impressed beneath the apex; pale ochreous on the dorsal half, dark tawny red on the costal half, a dark purplish fuscous shade overspreads the basal and lower portions of the costal half, and on the costa is a series of pale ochreous geminated streaks terminating (especially those towards the apex) in very oblique pale steel-grey lines; the pale ochreous dorsal colouring extends to the costa at the extreme base and separates the costal shade from the fold for about one-fourth the wing-length; it also encroaches upon it by a small angular excrescence at about one-third, from a little beyond the middle of the wing it extends obliquely across the fold in a straight line to the extreme apex; a slight brownish ochreous shade passes upwards from the tornus direct, not obliquely, and contains three or four dark fuscous dots, this shade extends to the upper half of the termen; there is also a shade of a similar colour below the middle of the fold, with a small patch of fuscous scales at the extreme base of the dorsum; cilia pale ochreous, shaded with brownish ochreous at their middle, and with greyish fuscous for a small space above the middle of the termen; underside with the costal spots showing distinctly throughout. *Exp. al.* 20 mm. *Hind wings* dark brownish fuscous; cilia

greyish. *Abdomen* dark greyish fuscous; anal tuft ochreous. *Legs* whitish ochreous, shaded with greyish ochreous, hind tarsal joints spotted.

Type, ♀ (60421) Mus. Wlsm.

Hab. COREA—Gensan, VII.-IX. 1887 (*Ito*). Unique.

DUDUA, Wkr.

DUDUA, Wkr. Cat. Lep. Ins. B. M. XXX. 1000 (1864).

Dudua hesperialis, Wkr.

Dudua hesperialis, Wkr. Cat. Lep. Ins. B. M. XXX. 1000 (1864)¹.

Antennæ dark brownish fuscous. *Palpi* short, porrect, terminal joint almost concealed; bluish grey. *Head* very dark brownish fuscous. *Thorax* with an erect crest posteriorly; very dark brownish fuscous; tegulæ spotted with steel-blue. *Fore wings* dark brownish fuscous, freely spotted with shining steel-blue; before the middle of the costa are three pairs of steel-blue streaks, touched with whitish at their upper ends; on the extreme costa beyond the middle are four pairs of oblique geminated whitish streaklets, with a single one, not oblique, before the apex; of these the first pair, and the third pair (counting from the middle of the wing), send out oblique lines of steel-blue towards the termen; a steel-blue band from the tornus, running upwards for more than half the breadth of the wing, is preceded and followed by some patches of cinereous scales, which also extend upwards along the termen; the remainder of the lower half of the wing, with the exception of a space above the middle of the fold, is freely sprinkled with steel-blue spots; these are more thickly grouped beyond the middle than before it, except perhaps at the extreme base; cilia shining steel-blue, tipped with fuscous, at the apex dark fuscous. *Exp. al.* 19 mm. *Hind wings* greyish brown; cilia pale cinereous, a dark shade running through them near their base. *Abdomen* greyish brown. *Legs* pale cinereous; posterior tarsal joints shaded and banded with greyish fuscous.

Type, ♂ (*Saunders Coll.*), Mus. Br.—acquired 1894.

Hab. JAPAN (*Pryer*, 1886)—*Kiusiu*—Satsuma, V. 1886 (*Leech*). CHINA—Chang Yang, 4000–6000 ft. (*Pratt*, 1886). BORNEO—Sarawak¹.

The above description, taken from a female from Satsuma (60012), was made before the rediscovery of the missing types "in Mr. Saunders's Collection." I have only females and therefore cannot determine whether the genus *Dudua* is

distinct. I noted that the type, which is unset, had broadly fringed hind tibiæ, and Mr. Durrant, who drew the neurination, thought that the flexus of the hind wings was probably somewhat bulged as in *Phæcadophora*. At present it cannot be determined whether *Dudua* should be referred to *Phæcasiophora*, Grt., or to *Phæcadophora*, Wlsm., or whether it is distinct from both.

PHÆCASIOPHORA, Grt.

924 (14). *Phæcasiophora Fernaldana*, sp. n.

Antennæ reddish fuscous. *Palpi* reddish brown at the sides, paler towards the apex. *Head* reddish brown. *Thorax* rosy fawn, mottled with umber-brown. *Fore wings* rosy fawn, with a short basal patch and three irregular fasciaform markings all confined to the costal side of the fold; these markings are all broken up and jagged at the edges and consist of greyish fuscous and olive-brown, margined and reticulated with dark umber-brown; the short basal patch is narrow on the costa, dilated and angulated on the upper edge of the cell, its lower margin not reaching the fold and ill-defined; the first fasciaform band is, at one-third the wing-length, broken into two patches, the first adjacent to the costa, irregularly quadrate, the other beneath it, adjacent to the fold, somewhat reniform; the second fascia, beginning scarcely beyond the costa, is wider and more conspicuous than the other two, and sends out three excrescences on its outer side and two slight projections on its inner side, the pale ground-colour between the outer excrescences gives the appearance of a spot (or reduplicated spot) about the upper angle of the cell; the third fascia does not reach the costa, but is curved from near its outer fourth, first outwards towards the apex, then downwards in the direction of the tornus, sending out two projections on its outer side towards the termen; between this fascia and the apex of the wing is a slight grey shade, followed by a slender dark umber-brown line and a small triangular apical spot; the extreme costa is narrowly pale fawn-colour, with numerous short striæ, some oblique, some almost straight; the rosy fawn portions of the wing between the fasciæ, as well as the dorsal fourth of the wing-width, are clouded and reticulated with grey and greyish fuscous and with a small proportion of umber-brown; cilia pale fawn, with a narrow brownish line near their base and three or four greyish spots running through them at the apex and on the termen. *Exp. al.* 22-24 mm. *Hind wings*

brownish fuscous, inclining to whitish on the costa and limbus; cilia pale cinereous, a dark line near their base. *Abdomen* greyish fuscous, anal tuft cinereous fawn. *Legs*: ♂ with the posterior pair densely and widely tufted above with long white hair-scales; posterior tarsal joints lightly spotted with greyish fuscous above.

Type, ♂ (70279, Japan); ♀ (70275) Mus. Wlsm.

Hab. COREA — Gensan, VII.-IX. 1887 (Ito). JAPAN (Pryer, 1886). Sixteen specimens.

This species is larger than the American *confixana*, Wkr., which it greatly resembles, although the actual form of the markings is somewhat different, the pattern appearing fairly constant through a considerable series of specimens.

924 (15). *Phæcasiophora Pryeri*, sp. n.

Antennæ pale brownish fawn. *Palpi* whitish fawn, touched with brownish externally. *Head* brownish fawn. *Thorax* evenly mottled with whitish fawn and brown. *Fore wings* whitish fawn, divided into innumerable streaks and reticulations by brown spots, lines, and patches; a basal patch occupying about one-third of the wing is but faintly indicated by three brownish spots in a fasciaform series, each margined with umber-brown, and is much reticulated throughout; from the middle of the costa is a large brown blotch shaded with umber-brown, and another below it, not crossing the fold, and partly connected with the first, at its upper edge this patch is also clouded with dark umber-brown and sends out two excrescences on its outer side, these are outlined by whitish fawn streaks enclosing shining bluish grey scales and forming an elongate whitish fawn spot between the excrescences, extended outwards and downwards; beyond them is a curved patch of fawn-brown, through which run six or more transverse lines of dark umber-brown; this patch is narrowly connected with the termen about its middle, and on its upperside is bounded by a long curved whitish fawn line, reaching from the dark costal patch to the middle of the termen, having some shining grey scales along its upper edge; above it are five pairs of pale costal geminations, separated by brown spaces, the apex itself is brown, a pale waved line running from the last costal gemination nearly to the middle of the termen; there is also a rather inconspicuous brown patch on the dorsum before the tornus; cilia reddish fawn, a reddish brown shade running throughout them near their base, and some greyish spots about the apex and termen. *Exp. al.* 20 mm. *Hind wings* dark greyish

brown; cilia whitish cinereous, with a greyish brown line near their base. *Abdomen* greyish brown, anal tuft inclining to ochreous. *Legs*: ♂, posterior pair, densely and widely tufted above with long whitish cinereous hair-scales; posterior tarsal joints faintly spotted with pale brownish.

Type, ♂ (70270); ♀ (70269) Mus. Wlsm.

Hab. JAPAN (Pryer, 1886)—HONDO—Foochau, IV. 1886 (Leech). Nine specimens.