

Vine, G. R., jun. (Hamilton, A.).

On the *Foraminifera* of the Tertiary Beds at Petane, near Napier.  
Trans. N.Z. Inst., xiii, 393.

Waters, Arthur William.

On Tertiary Cyclostomatous *Bryozoa* from New Zealand. Q.J. Geol. Soc., vol. xliii, 1887, p. 337, pl. xviii.

On Tertiary Chilostomatous *Bryozoa* from New Zealand. Q.J. Geol. Soc., 1887, vol. xliii, p. 40, pls. vi–viii.

Woodward, Henry.

On a New Fossil Crab from the Tertiary of New Zealand, collected by Dr. Hector (with a note by Dr. Hector). Q.J. Geol. Soc., vol. xxxii, p. 51, pl. vii; 1875. [*Harpactocarcinus tumidus*. Rep. N.Z. Geol. Surv., 1873–74, p. 111.]

Zittel, Dr. Karl A.

Fossile Mollusken und Echinodermen (N.Z.). Mit 10 Tafeln, vi–xv, 15–68, Pal. Voy. "Novara." 1864.

Fossile Mollusken und Echinodermen aus Neu-seeland; nebst Beiträgen von Herrn Bergrath Fr. Ritter von Hauer und Prof. E. Suess. 10 Plates. See Geol. Mag., vol. i, p. 73; 1864.

Zittel, Count M.

General Notes from Proc. Imp. Geol. Institut., Vienna, Jan. 20, 1863.

On Hochstetter's Collection. See Q.J. Geol. Soc., 1863, vol. xix; pt. ii, p. 20.

ART. IX.—*Notes on New Zealand Lepidoptera.*

By E. MEYRICK, B.A., F.R.S.

Communicated by G. V. Hudson, F.E.S.

[Read before the Wellington Philosophical Society, 5th May, 1909.]

CARADRINIDÆ.

*Melanchra decorata*, Philp.

Mr. Philpott has sent me a ♀ of this species, with the request that I would describe it, as his description was taken from a faded specimen, and is therefore in some respects defective.

40 mm. Head mixed with whitish, olive-yellowish, pale-greenish, pale-crimson, and dark-fuscous colouring. Palpi ochreous-whitish irrorated with crimson, second joint with a streak of black irroration. Thorax with strong anterior bifid crest, light pinkish-ochreous streaked and on collar barred with blackish and light-greenish. Forewings pale ochreous suffused with light olive-greenish; veins more or less marked with fine interrupted black lines; first and second lines double, very indistinct, darker greenish, wavy, forming pairs of small blackish spots on costa, second strongly retracted near costa so as to be parallel to costa for some distance; median line dark

fuscous, angulated near costa, on costa blackish; orbicular and reniform finely outlined with black, orbicular rather large, suboval, oblique, reniform large, transverse-oval, pale whitish-rosy; a broad irregular dark-fuscous streak above fold from base to termen, including a strong black line along fold, edged beneath by an irregular streak of white suffusion from before middle to subterminal line, on which it is bent upwards for a short distance; subterminal line otherwise faintly indicated, pale, wavy, traversing an oblique dark reddish-fuscous suffused streak above middle: cilia pale ochreous, suffused with greenish and barred with fuscous. Hindwings rather dark grey, tinged with pinkish, with suffused darker grey discal spot and terminal band: cilia light greyish-ochreous, with a greenish-fuscous shade.

*A distinct species.*

I have been asked to express an opinion on the classification adopted by Sir George Hampson in his "British Museum Catalogue" for this family, so far as it relates to New Zealand species. The matter cannot be discussed in detail without entering on a general survey of other faunas; but, speaking generally, I may say that I see no reason at present to alter my previous views as to the limits and constitution of the New Zealand genera. I should not recommend any student of the group to adopt the generic divisions employed by Sir George Hampson unless he finds that he can in practice always clearly distinguish these genera by the structural characters employed, and also finds that these genera appear to him truly natural—that is, such that the species in each genus are more closely allied together through inheritance of common characters than they are to the species of any other genus. I do not myself find this, and am therefore at present unable to adopt his classification, which appears to me to conflict with geographical distribution, instead of explaining it.

#### CRAMBIDÆ.

##### *Crambus thrincodes*, n. sp.

♂. 28 mm. Head white, with a light ochreous spot behind eye. Labial palpi fuscous, basal joint white. Maxillary palpi white, towards base dark fuscous. Antennæ white, beneath brownish-ochreous. Thorax white, patagia suffused with pale ochreous and sprinkled with dark fuscous. Abdomen whitish-ochreous tinged with yellow. Forewings elongate, very narrow, gradually dilated, costa slightly arched, apex obtuse, termen slightly rounded, oblique; light ochreous-brownish, veins sprinkled with dark fuscous; a broad white costal streak, suffused beneath, enclosing a narrow blackish costal streak from base almost to apex, which is divided into three portions by rather broad interruptions of white before middle and at  $\frac{3}{4}$  (representing origin of first and second lines); on lower margin of the white streak are a longitudinal projection at base, and an inwards-oblique projection representing first line, space between and beyond these to near middle suffused with blackish; beyond this a suffused white streak in disc to  $\frac{3}{4}$ , between which and costal streak is enclosed a round white discal spot at  $\frac{2}{3}$  edged with dark fuscous and centred with a fuscous dot; second line from costal streak to dorsum before tornus white, sharply dentate, indented near dorsum: cilia light brownish, partially barred with white. Hindwings whitish-ochreous; a small spot of grey suffusion on costa before apex; cilia ochreous-whitish.

Kaitoke; one specimen received from Mr. G. V. Hudson. This remarkable and very distinct species is intermediate in character between

*flexuosellus*, *tuhualis*, and *cyclopicus*, partaking nearly equally of the characters of all three; it is probably very local.

## TORTRICIDÆ.

*Caccœcia acrocausta*, Meyr.

Additional specimens sent by Mr. A. Philpott show the variation of colouring to be very considerable; one ♂ is very uniformly coloured, forewings light brownish, with two or three black scales, costal extremity of central fascia and costal patch indicated by two very small darker spots, hindwings whitish-grey; three females are whitish-ochreous more or less strongly tinged with yellow, with well-marked small yellow-brown or dark fuscous spots on costa in middle and at  $\frac{3}{4}$ , and sometimes one at  $\frac{1}{5}$ , dorsal extremities of basal patch and central fascia and sometimes intervening space clouded with brown, hindwings ochreous-whitish. The species is, however, always recognisable by the form of wing and palpi, the dark patch in apical cilia (least conspicuous in the ♂ mentioned above), and staking of 6 and 7 of hindwings.

## PHALONIADÆ.

*Heterocrossa adreptella*, Walk.

A ♂ sent by Mr. A. Philpott has a streak of blackish suffusion along fold throughout, and another rising from this near base and traversing disc to  $\frac{2}{3}$ .

## ECOPHORIDÆ.

*Borkhausenia paratrimma*, n. sp.

♂. 15 mm. Head and thorax ferruginous-ochreous. Palpi ochreous irrorated with dark fuscous. Antennæ dark grey. Abdomen grey. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded; ferruginous-ochreous; very indistinct oblique fasciæ of fuscous irroration before and beyond middle; some slight fuscous irroration towards apex: cilia ferruginous-ochreous. Hindwings and cilia grey.

Invercargill, in December; two specimens received from Mr. A. Philpott. Allied to *B. siderodeta*, but certainly distinct, being rather broader-winged; differs by absence of dark fuscous irroration in forewings, and grey, not dark fuscous, hindwings.

*Borkhausenia amnopis*, n. sp.

♀. 16–18 mm. Head whitish-ochreous, sides of face sprinkled with grey. Palpi whitish-ochreous irrorated with dark fuscous, apex of joints whitish. Antennæ dark grey ringed with white, alternate rings wider. Thorax whitish-ochreous irrorated with dark fuscous. Abdomen dark grey, segmental margins white. Forewings elongate, costa moderately arched, apex round-pointed, termen almost straight, very oblique; whitish-ochreous, irregularly mixed with whitish and pale ferruginous-ochreous, and irrorated throughout with grey; a short oblique blackish streak representing plical stigma; first discal stigma moderate, round, blackish, beyond plical; second discal larger, round, fuscous or dark fuscous, edged with black, connected with tornus by a patch of fuscous suffusion; a curved black irregular subterminal line, indented near costa and sinuate above dorsum, more or less edged with white anteriorly; some fine blackish irroration towards costa before and beyond middle: cilia whitish-ochreous, more or

less sprinkled with dark fuscous, especially on a tornal patch, beneath which is an ochreous-whitish patch. Hindwings grey; cilia pale grey, with grey subbasal shade.

Invercargill, from November to March; two specimens received from Mr. A. Philpott. Allied to *contextella*, but somewhat broader-winged, and distinguished by the general grey irroration, black subterminal line, which is placed so that costal extremity is nearer apex, and grey hindwings.

#### *Zirosaris*, n. g.

Head with appressed hairs; ocelli present; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ shortly ciliated ( $\frac{2}{3}$ ), basal joint moderate, without pecten. Labial palpi long, recurved, second joint beneath with dense long rough projecting scales throughout, terminal joint shorter than second, slender, acute. Maxillary palpi rudimentary. Thorax with small posterior crest. Posterior tibiæ clothed with hairs above. Forewings with tufts of scales on surface; 2 nearly from angle, 7 and 8 stalked, 7 to apex, 11 from middle. Hindwings 1, elongate-ovate, cilia  $\frac{1}{2}$ ; 3 and 4 connate, 5-7 parallel.

Allied to *Trachypepla*, but with quite different palpi.

#### *Zirosaris amorbas*, n. sp.

♂. 19 mm. Head and thorax blackish, finely sprinkled with grey-whitish. Palpi blackish, second joint finely sprinkled with whitish, terminal joint with two oblique whitish lines. Antennæ blackish, finely dotted with white. Abdomen dark fuscous, segmental margins white. Forewings elongate, rather narrow, costa gently arched, apex rounded, termen obliquely rounded; dark purplish-fuscous mixed with blackish; basal area, an undefined spot on middle of costa, and four diminishing spots on costa posteriorly finely sprinkled with whitish; two raised tufts containing a few brownish-ochreous scales transversely placed in disc at about  $\frac{1}{4}$ ; stigmata formed by raised black tufts, plical beneath first discal, second discal transverse, edged with white posteriorly, above the two discal stigmata are a few pale brownish-ochreous scales; a curved posterior line of whitish irroration indistinctly indicated: cilia dark grey with some white points and a blackish-grey shade. Hindwings dark fuscous, towards apex irrorated with blackish; cilia fuscous, with blackish subbasal shade.

Broken River, Canterbury; one specimen collected by Mr. J. H. Lewis, received through Mr. A. Philpott.