

Male, female.—16–17 mm. Head and thorax white, slightly speckled with grey. Palpi in male moderate, in female long; lower half dark fuscous, upper half white. Antennæ whitish. Abdomen and legs ochreous-whitish, anterior and middle pair dark fuscous except apex of joints. Forewings elongate, narrow, tolerably oblong, costa moderately arched, apex round-pointed, hindmargin straight, very oblique; white, densely irrorated with pale fuscous-grey; a short black streak from base beneath costa; tufts preceded by a few black scales; sometimes a thick irregular blackish longitudinal streak in disc, extending from $\frac{1}{4}$ – $\frac{2}{3}$; cilia white, densely irrorated with pale grey. Hindwings grey-whitish; cilia whitish.

Characterized by the short black subcostal streak. The arrangement of the surface tufts of scales appears to be the same in all the species.

Dunedin and Invercargill, in September; three specimens from *Leptospermum*.

Het. epomiana, n. sp.

Minor, alis ant. dilutissime griseis, partim albo-conspersis, macula costæ basali nigra, maculis costæ sex parvis, aliisque disci plerisque obscuris fuscis; post. griseo-albidis.

Female.—17 mm. Head and thorax white, irrorated with light grey. Palpi rather long, lower half dark fuscous, upper white. Antennæ whitish. Abdomen and legs ochreous-whitish, anterior pair suffused with dark fuscous, middle pair greyish. Forewings elongate, narrow, oblong, costa moderately arched, somewhat bent at $\frac{1}{3}$, apex round-pointed, hindmargin slightly sinuate, rather strongly oblique; very pale grey, irrorated with white towards costa and hindmargin, and with scattered dark fuscous scales; a blackish elongate spot along costa at base; a blackish dot above inner margin near base; costa with six small fuscous spots between $\frac{1}{3}$ and apex; discal and posterior tufts also preceded by small obscure fuscous spots; cilia pale grey mixed with whitish. Hindwings and cilia grey-whitish.

Easily recognizable by the conspicuous elongate black spot on base of costa.

Otira River; one specimen amongst forest at 1,600 feet, in January.

ART. XIV.—*Description of a small Lizard, a Species of Nautilinus, supposed to be new to Science.* By W. COLENZO, F.L.S.

[Read before the Wellington Philosophical Society, 1st October 1894.]

Nautilinus versicolor, sp. nov.

GENERAL COLOUR.—Above light brownish-black or dark grey, spotted with small dark spots; six broad dark-umber zig-zag, or double VV, shaped bands across the body, and nine similar ones across the tail, 15 in all, and

regularly placed, having lighter scales in the anterior angles; a dark line from the lower angle of eye to that of mouth, and another from the upper angle of eye to over the ear; a narrow dark transverse band from eye to eye in front, and a cross dark band (St. Andrew's Cross) on vertex; below of a light-greyish colour with small dark spots.

Vertex depressed; eyebrows very prominent (porrected) with 2-3 rows of dark pointed scales, upper row black: snout very obtuse; on both upper and lower lips, 11 large greyish scales on each side of the rostral ones which are much larger, but the upper rostral is larger than that of the chin, and extends to the nostrils; two large scales immediately above the upper rostral one, and four similar scales around each nostril; nostrils circular; aural apertures oblong, large. A number of small pointed simple glassy teeth in both jaws; tongue roundly-spathulate, very long and extensible, thin, deeply emarginate, red; the palate salmon-colour. Body narrow and round, back arched, not broad and flat as in *N. pacificus*. Toes all regularly barred with blackish lines; the fourth toe is the longest on each foot, and at a great distance from the fifth one on the hind feet, the soles also of the hind pair are large and flat. Its tail is very prehensile, so that it can curl its tip around a lead pencil, or a quill, and swing thereby; it can also hang by a single toenail (which are exceedingly sharp pointed and curved) and so remain for a short time; it also leaps well and fearlessly from a height of 2-3 feet. Length—head and body, 4 inches; tail, $4\frac{1}{2}$ inches = $8\frac{1}{2}$ inches.

Hab. In forests near Norsewood, County of Waipawa; 1883: W.C. Also at Glenross, County of Hawke's Bay; 1884: Mr. D. P. Balfour.

Obs. I obtained two fine living specimens of this lizard last summer while in those woods; and one since, a smaller one, also living, from Mr. Balfour; this last is still living, although it has not eaten anything since I received it nearly six weeks back. It has only taken at intervals of several days a very little water, and this when I put it into a wash-hand basin to take a swim; when, on taking it out, it invariably licks up a few drops. Hitherto it has refused flies, as food, which my other lizards always greedily ate; and I have supposed such might be owing to its hibernating season not being over. It is exceedingly quiet, and rarely moves about. Their peculiar and regular double VV dark and variegated bands are the same in all three specimens; but it is not from that fact that it derives its trivial name, but from a much more strange one (though not wholly unknown to the family), viz., it often changes its ground-colour of grey to a pink-red, and this it does sometimes three or four times in a day; the cause, however, of its doing so is wholly unknown to me. I have often tried, by altering its position as to light, and to heat (sun), and also by giving it a little gentle shaking (in its glass house!) if I could cause it to change its colour, but I

have never once succeeded; it seems to be entirely dependent on itself (possibly emotional), and not arising from any outward cause—nor from the time of day; neither is it regular in its changes. At first, I was a little astonished, and could scarcely believe my own eyes, until I had repeatedly proved the event; the change of colour is always equally the same, extending all over its body.

This lizard is also infested with a tiny red parasite, that sticks on between its scales in the outer angles of the thighs of its hindlegs, where it lives together in little clusters of 12–16. This parasite has a thickish body, rather soft, and is very difficult to remove entire. I suppose it to be an insect of the *Hemiptera* order. I have sent specimens of it to Professor Hutton at Christchurch, and to Mr. Maskell at the Museum, Wellington, for examination, etc.

ART. XV.—*A Description of some newly-discovered New Zealand Insects believed to be new to Science.* By W. COLENSO, F.L.S.

[Read before the Wellington Philosophical Society, 1st October, 1884.]

INSECTA.

Order ORTHOPTERA.

Section GRESSORIA.

Family PHAOMIDÆ.

Division APTEROPHASMINEÆ.

Genus *Bacillus*.

1. *Bacillus colereus*, sp. nov.

Female; General colour light green; the two basal joints of antennæ (under-surface), the throat, and the upper long curved ends of anterior femora bright pink-red.

Head oblong, rather narrow, 8–9 short scattered muricated points on vertex; occiput broad, width of prothorax; maxillary palpi finely pubescent; antennæ 12 lines long, very slender, cylindrical, pubescent, composed of 22 joints, articulations pink-red, the basal joint large broad and flattish and green on the upper surface, the second basal very small, the rest large, brownish-green with a pink tinge, increasing in size to apex.

Body mostly smooth, $3\frac{1}{2}$ inches long, stout, increasing in size to 3rd abdominal segment where it is $3\frac{1}{2}$ lines wide, a narrow slightly-winged crease or fold with a light-yellow margin extending downwards from anterior legs, giving the appearance of double side margins to the abdomen, which is 19 lines long; a small triangular central dark-brown spot at occiput, another at lower end of pronotum, with a very narrow dark line