

small worm then, easily overlooked. The animal is soft-bodied, subcylindrical, without legs or feelers or appendages of any sort, without shell or other hard parts; but it is easily distinguished from ordinary marine worms in that the body presents the three following well-marked regions: (1) The anterior end of the body is an elongated cone, bluntly pointed at the tip, and fairly mobile (it is remarkable in this species for possessing a groove running along its dorsal surface); this "proboscis" is in life not quite $\frac{1}{2}$ in. long. Its base is surrounded by (2) a collar-like region of very short extent; and beyond this is (3) the body proper, tapering off posteriorly, but not ending in any definite tail.

It is unnecessary for me to enter into any anatomical details—these will be found elsewhere; but I give an outline drawing of the worm to aid the above description.



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Outline Sketch of *Balanoglossus otagoensis* ($\times 4$).

1. Proboscis, with dorsal groove.
2. Collar.
3. Body.

ART. IV.—Notes on Macro-lepidoptera observed during the Summer of 1898–99.

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[Read before the Wellington Philosophical Society, 12th September, 1899.]

THE following notes refer to a few observations on *Macro-lepidoptera*, which have been made since the publication of my book on "New Zealand Moths and Butterflies."

Dasypodia selenophora.

This large and handsome insect was unusually common during the past summer. Several specimens were obtained in the Hutt Valley by Sir James Hector, and by Mr. Williams. A specimen was also found at Karori, where, so far as I am aware, the insect had never occurred previously, although I have worked the locality continuously since 1882. Last April I received a very fine specimen from Wanganui, and about

the same time Mr. A. P. Buller informed me that he had taken a magnificent specimen near Featherston.

Paradetis porphyrias.

During a visit to Wainuiomata early last December I found this species quite commonly flying amongst the ferns which fringe the road on the northern side of the reservoir. Previously, the insect was only recorded from a few mountain localities in the South Island, so that its occurrence at Wainuiomata is very interesting. I, however, expected that the moth would prove to be more generally distributed than was at first supposed. ("New Zealand Moths and Butterflies," p. 41.)

Asaphodes siris.

Two specimens of this species have been taken near Wellington by Mr. Hawthorne since the publication of his description of the insect in vol. xxix. of the Transactions. The three specimens which are thus available exhibit no variations, and prove beyond all doubt the distinctness of the species.

Selidosema fenerata.

Early last February I succeeded for the first time in working out the life-history of this species. The larva, which was discovered feeding on *macrocarpa*, is very handsome. Its length when full grown is about 1 inch. The general colour is vivid green, with shining white markings. There is a broad lateral line, with an interrupted line above it; a series of large crescentic marks down the back, with a white dash in the middle of each; two interrupted subventral white lines. The head is green, with a rusty-brown mark on each side. This larva is very inconspicuous amongst the foliage of the *Macrocarpa*, and its colouring is evidently protective. Originally its food-plant was probably rimu, amongst the foliage of which the caterpillar's remarkable colouring would probably be equally efficient for protective purposes. The pupa is concealed about 1 inch below the surface of the earth. The perfect insects emerged towards the end of March; but in a state of nature *S. fenerata* is found during most of the year.

Azelina fortinata.

In December last this species was extremely abundant at Wainuiomata, frequenting clumps of *Lomaria* (?), a fern which occurred plentifully in many parts of the forest above the reservoir. I have always noticed this insect attached to this particular fern, and I expect that its larva feeds thereon; but, although I spent some hours in searching, I was unable to find any specimens of the larva. Many of the fronds were

eaten, and very probably a careful examination of the ferns during the latter end of October or beginning of November would result in the discovery of the larva. The perfect insect was about at the time of my visit, therefore it was possibly a month or six weeks too late in the season for the larva to be found.

Declana floccosa.

In October, 1897, I captured in my garden at Karori a specimen of this insect, with the central band of the forewings unusually broad and extremely dark in colour. It is quite a new variety to me, and differs considerably from any of the numerous varieties of *D. floccosa* which I have previously described and figured. (See "New Zealand Moths and Butterflies," p. 96.)

Sphinx convolvuli.

On the 15th January last Sir James Hector kindly sent me some larvæ of this handsome insect. It is an extremely difficult caterpillar to rear, and I have only succeeded in bringing one specimen to the pupa state, and it is doubtful whether even this specimen will ever give rise to a moth. The larvæ appear to have been plentiful in the neighbourhood of Picton during last summer. As a rule *S. convolvuli* is not found southward of Napier and New Plymouth, although it is occasionally common in the more northern districts.

Vanessa itea.

This insect was extremely abundant during the past autumn. At Easter the weather was exceptionally fine and mild, and I observed many specimens of this beautiful butterfly in my garden at Karori. It was then certainly quite as common as *Vanessa gonerilla*. During the same holidays a very fine series of over a dozen specimens of *V. itea* was taken by Miss Blair on the flowers of a heliotrope in her garden in Grant Road, which series I have much pleasure in exhibiting before the Society this evening. Mr. Powles has also observed this butterfly in large numbers in his garden, and I think that the past season will be remembered as the "*itea*" year, by every one in Wellington who is interested in butterflies.

Porina characterifera.

Of this rare and beautiful species I captured one very fine specimen at Kaitoke on the 9th November last. It was resting with closed wings on the moss-covered trunk of a birch-tree, where it was extremely difficult to see. Although I spent fully two hours examining other tree-trunks in the vicinity, I did not succeed in finding any others.