

INSECTS OF CAMPBELL ISLAND.
LEPIDOPTERA: TINEIDAE, ELACHISTIDAE,
HYPONOMEUTIDAE, OECOPHORIDAE, TORTRICIDAE,
PTEROPHORIDAE, NOCTUIDAE¹

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Abstract: This paper concerns records of 10 species in 7 families. Four species are new to Campbell I. Previously 2 additional species of Microlepidoptera were recorded from the island.

The following species of Lepidoptera were collected mainly by Dr. J. L. Gressitt, Mr. K. P. Rennell and Mr. K. A. J. Wise on Campbell I. during 1961-63. The material treated in this paper consists of 477 specimens. It contains 10 species belonging to 7 families, of which 4 species are recorded here for the first time from Campbell Island. *Endrosis lactella* Den. & Schiff. is recorded as the first species of Oecophoridae from the island.

I express my gratitude to Dr. J. L. Gressitt, Bishop Museum, for the opportunity to study the material.

Family TINEIDAE

Proterodesma byrsopola Meyrick, 1909, Subantarct. Is. New Zealand 1: 74. Fig. 1.

SPECIMENS EXAMINED: 16♂♂, 2♀♀, 1 ex., Tucker Cove, 4 m, Malaise trap, 27. XI-1. XII.1961, Gressitt; 38♂♂, 10♀♀, 3 exs., *ibid.*, 1-21. XII.1961, Gressitt; 1♂, Tucker Cove, 0-100 m, 1. II.1963, Wise; 3♂♂, Shoal Pt., 0-10 m, tussock, 29. VII. 1962, Rennell; 1♂, E of Shoal Pt., sweeping tussock above beach, 7. II.1963, Rennell; 1♂, Beeman Camp, 2-50 m, dead *Dracophyllum* wood, 1-5. XII.1961, Gressitt; 1♂, *ibid.*, on building, 26. VII. 1962, Rennell; 1♂, *ibid.*, *Coprosma*, 13. VIII. 1962, Rennell; 1♀, Beeman Camp, 15 m, 1. IX.1962, Rennell; 2♂♂, Beeman Camp station, 7-14. II. 1963, Wise; 1♀, Lookout Bay, Perseverance Harbor, sweeping, 3. II.1963, Wise; 2♂♂, 1♀, Campbell I., 23. X.1961, Wise; 1 larva, 1 pupa, Garden Cove, 27. VIII. 1962, Rennell.

DISTRIBUTION: New Zealand, Auckland I. (Norman's Inlet), Campbell I.

This well characterized species was described by Meyrick based on specimens collected

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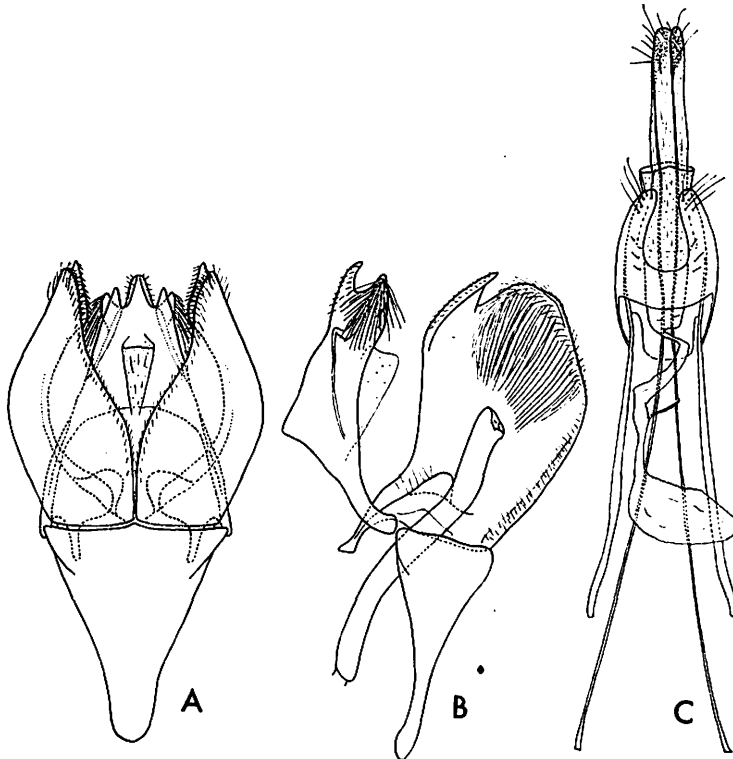


Fig. 1. *Proterodesma byrsopola* Meyrick. A, ♂ genitalia, excluding aedeagus; B, ditto, lateral view, excluding left valva; C, ♀ genitalia.

on Auckland I. Hudson (1909) gave a note on this species in the same work where Meyrick described it. Later, Hudson (1928) and Salmon (1956) recorded it from New Zealand, Auckland Is., and Campbell I. The ♂ and ♀ genitalia of this species are shown in fig. 1.

Family ELACHISTIDAE

Euproteodes galathea Viette, 1954, Ent. Medd. 27: 21, fig.

SPECIMENS EXAMINED: 1♂, 1♀, Tucker Cove, 4 m, 21-23. XI. 1961, Gressitt; 56♂♂, 3 ♀♀, Tucker Cove, 1-50 m, 21. XI-17. XII. 1961, Gressitt; 5♂♂, *ibid.*, *Poa*, 21-25. XI. 1961, Gressitt; 6♂♂, 1♀, *ibid.*, on sedge, 6-11. XII. 1961, Gressitt; 4♂♂, 2♀♀, Tucker Cove, 0-100 m, sedge, 7. VIII. 1962, Rennell; 2♀♀, Tucker Cove, 0-100 m, 1. II. 1963, Wise; 1♂, 1♀, *ibid.*, sedge, 25. II. 1963, Wise; 1♂, Tucker Cove, 0-30 m, *Dracophyllum*, 7. VIII. 1962, Rennell; 1♂, *ibid.*, 18. I. 1962, reared by Rennell; 1♂, Tucker Valley, 25 m, 27. XII. 1961, Rennell; 7♂♂, 3♀♀, Tucker Cove-St. Col Ridge, 30. XI. 1961, Gressitt; 3♂♂, *ibid.*, sedge, *Carex trifida*, 30. XI. 1961, Gressitt; 8♂♂, Beeman Camp, 2-50 m, sedge, 26-30. XI. 1961, Gressitt; 1♂, *ibid.*, *Bulbinella*, 26-30. XI. 1961, Gressitt; 1♂, *ibid.*, *Poa*, 26-30. XI. 1961, Gressitt; 12♂♂, 1♀, *ibid.*, 1-21. XII. 1961, Gressitt; 3♂♂, Beeman Camp, 30 m, sedge, 27.

VII. 1962, Rennell; 12♂♂, Beeman Camp, 15–50 m, sedge, 25. III. 1962, Rennell; 1♀, Beeman Cove, 1. I. 1962, Rennell; 1♀, Beeman, 15 m, 13. II. 1962, Rennell; 1♂, 1♀, Beeman Hill, 100–180 m, 2. XII. 1961, Gressitt; 1♀, *ibid.*, *Bulbinella*, 2. XII. 1961, Gressitt; 5♂♂, 1♀, Beeman Hill, swept ex tussock & sedge, 2. II. 1963, Wise; 5♂♂, 1♀, *ibid.*, sweeping, 2–11. II. 1963, Wise; 1♂, Beeman Hill summit, 190 m, swept ex tussock, 11. II. 1963, Wise; 3♂♂, 1♀, Beeman Pt., sweeping, 28. II. 1963, Wise; 10♂♂, Lookout Bay, beach, 3. XII. 1961, Gressitt; 2♂♂, *ibid.*, sedge, *Carex trifida*, 3. XII. 1961, Gressitt; 1♂, *ibid.*, *Poa*, 19. XII. 1961, Gressitt; 1♀, Lookout Bay, Perseverance Harbor, sweeping, 3. II. 1963, Wise; 1♂, 1♀, Garden Cove, beach, 25. XI. 1961, Gressitt; 1♂, Northwest Bay, beach, rocks, 29. XI. 1961, Gressitt & Rennell; 2♂♂, Northwest Bay, 5 m, tussock, 30. XII. 1962, Rennell; 2♀♀, Northwest Bay area, swept ex tussock, 5. II. 1963, Wise; 2♂♂, Mt. Lyall, 250 m, 5. XII. 1961, Gressitt; 3♂♂, Mt. Lyall, below summit, 390 m, tussock, 19. II. 1963, Wise; 2♂♂, Moubray Hill, 200 m, *Poa*, 12. XII. 1961, Gressitt; 1♂, Moubray Hill, north slopes, 16. II. 1963, Wise; 1♂, Mt. Dumas, slope, *Poa*, 20. XII. 1961, Gressitt; 1♂, *ibid.*, 20. XII. 1961, sedge, Gressitt; 1♂, Rocky Bay, 0–20 m, 20. I. 1962, Rennell; 1♀, Venus Cove, 2 m, tussock, 2. II. 1963, Rennell; 1♂, Camp Cove, sweeping long grass on edge of stream, 5. II. 1963, Rennell; 2♂♂, Camp Cove, sweeping, 6. II. 1963, Wise; 1♀, Shoal Pt., sweeping, 7. II. 1963, Wise; 1♂, Filhol Peak, sweeping, 9. II. 1963, Wise; 2♂♂, Monument Harbor, sweeping tussock above beach, 9. II. 1963, Rennell; 2♂♂, Mt. Azimuth, 470 m, *Bulbinella*, 13. II. 1963, Rennell; 1♂, *ibid.*, sweeping, 13. II. 1963, Wise; 4♂♂, St. Col Peak, 210–250 m, 23. II. 1963, Wise; 2♂♂, 3♀♀, Campbell I., Rennell.

DISTRIBUTION: Campbell I.

Family HYPONOMEUTIDAE

Tinearupa sorenseni Salmon & Bradley, 1956, Rec. Dominion Mus. 3 (1): 66, figs. 10–15.

SPECIMENS EXAMINED: 20♂♂, 5♀♀, 1 ex., 1 larva, Monument Harbor, nr. beach, 20 m, on rocks above shore, 10. XII. 1961, Gressitt; 1♀ (with pupal case and cocoon), *ibid.*, 17. XII. 1961, Rennell; 4♂♂, 2♀♀, Monument Harbor, shore rocks, 9. II. 1963, Wise; 2♂♂, 2♀♀, *ibid.*, shore rocks, 9. II. 1963, Rennell; 1♂, Davis Pt., 1–3 m, shore rocks, 12. XII. 1961, Gressitt; 5♂♂, 2♀♀, Courrejolles Pen., 200 m, ground about mollymawk nests, 14. XII. 1961, Gressitt & Rennell; 2♀♀, Courrejolles, 20. II. 1962, reared by Rennell; 1♀, Courrejolles Pen., 200 m, 3. XII. 1962, Rennell; 4♂♂, 4♀♀, Courrejolles Pen., 220–230 m, mollymawk colony, on rock cliffs, 12. II. 1963, Rennell; 18♂♂, 10♀♀, Courrejolles Pen., 230 m, mollymawk colony, on rock cliffs, 13. II. 1963, Rennell; 12♂♂, 10♀♀, *ibid.*, mollymawk colony, on rock cliffs, 13. II. 1963, Wise; 1♂, Mt. Azimuth, 350–450 m, 14. XII. 1961, Gressitt & Rennell; 1♂, Azimuth-Courrejolles, 240 m, sweeping, 13. II. 1963, Rennell; 1♂, 1 ex., Smoothwater Bay, rock cliffs, 16. II. 1963, Wise.

DISTRIBUTION: Campbell I.

Salmon & Bradley (1956) gave a note on the habitat of this species. According to the data of the present material, Mr. K. P. Rennell captured the larvae of this species at the Courrejolles Pen., and reared them. Two ♀♀ emerged from them. Data as follows: captured as larvae on 4. XII. 1961, pupated on 6. I. 1962, emerged on 20. II. 1962.

Campbellana attenuata Salmon & Bradley, 1956, Rec. Dominion Mus. 3 (1): 69, figs. 38–41.

SPECIMENS EXAMINED: 1♂, Tucker Cove, 0–100 m, sedge, 7. VIII. 1962, Rennell; 3♂♂, Mt. Lyall, below summit, 390 m, low plants, 19. II. 1963, Wise.

DISTRIBUTION: Campbell I.

This species was described on 2 specimens. According to the note given by Salmon & Bradley (1956), this species is uncommon in the island. I found 4 specimens in the present material.

Family OECOPHORIDAE

Endrosis lactella Denis et Schiffermüller, 1775, Ank. Syst. Werk. Schmett. Wien., 139.

SPECIMENS EXAMINED: 1♀, Tucker Cove, 1–50 m, 21–25. XI. 1961, Gressitt; 1♀, Beeman Camp, 15 m, 5. X. 1962, Rennell; 1♂, *ibid.*, 11. XII. 1962, Rennell.

DISTRIBUTION: Europe, India, Ceylon, Australia, New Zealand, Auckland I., Campbell I., Hawaiian Is., N. & S. America, Africa.

This species is distributed throughout most of the world. Salmon (1956) recorded it from Auckland I. This is the first record of this species from Campbell I.

Family TORTRICIDAE

Capua plagiata Walker, 1864, List Lep. Ins. Coll. Brit. Mus. 28: 370.

SPECIMENS EXAMINED: 29♂♂, 4♀♀, Tucker Cove, 4 m, Malaise trap, 27. XI–21. XII. 1961, Gressitt; 1♂, Tucker Cove, 20 m, 4. XII. 1961, Gressitt; 1♀, Tucker Valley, 25 m, under lichen on *Dracophyllum*, 13. VIII. 1962, Rennell; 1♂, Beeman Camp, 2–50 m, 13. XII. 1961, Gressitt; 1♀, Beeman Camp, on lighted window, 2. V. 1962, Rennell; 1♂, 1♀, *ibid.*, 8. V. 1962, on window, Rennell; 1♀, Beeman Camp, 100 m, *Dracophyllum*, 3. VIII. 1962, Rennell; 2♂♂, Beeman Camp, 100–150 m, *Coprosma*, —. 1962, Rennell; 1♀, Beeman Hill, sweeping, 2. II. 1963, Wise; 1♂, Mt. Lyall, 150 m, fern, 3–12. XII. 1961, Gressitt.

DISTRIBUTION: New Zealand, Auckland I. (Norman's Inlet), Campbell I.

Tortrix melanosperma Meyrick, 1916, Trans. N. Z. Inst. 48: 414.

SPECIMEN EXAMINED: 1♂, Tucker Cove, 4 m, 16–18. XII. 1961, Malaise trap, Gressitt.

DISTRIBUTION: New Zealand, Campbell I.

The present specimen, which is in rather good condition, may be best regarded as *melanosperma* from New Zealand as it well agrees with the original description. This is the first record of this species from Campbell I.

Family PTEROPHORIDAE

Platyptilia aeolodes Meyrick, 1902, Trans. Ent. Soc. Lond. 1902: 278.

SPECIMEN EXAMINED: 1♂, Beeman Camp, Inside building, 22. II. 1962, Rennell.

DISTRIBUTION: New Zealand, Chatham Is., Auckland I., Campbell I.

This species was originally described from the Chatham Is. It is also found in New Zealand, Auckland I. and Campbell I. Salmon (1956) examined 15 specimens of this species from the latter two islands.

Platyptilia falcatalis (Walker)

Platyptilus falcatalis Walk. 1864, List. Lep. Ins. Coll. Brit. Mus. 30: 931.

SPECIMENS EXAMINED: 1♀, Tucker Cove, 4 m, Malaise trap, 27.XI-1.XII.1961, Gressitt; 2♂♂, Beeman Camp, 15 m, 10-18.X.1962, Rennell; 1♂, *ibid.*, off lighted windows, 29.IX.1962, Rennell; 1♀, St. Col Ridge, 150 m, 10-18.X.1962, Rennell; 1♀, Mt. Dumas, 100 m, 10-18.X.1962, Rennell.

DISTRIBUTION: New Zealand, Campbell I.

This species is recorded here for the first time from Campbell I. It is closely allied to the preceding species and *repletalis* Walker from New Zealand, but these are separated from each other by characters in the description and note of *aeolodes* given by Meyrick (1902), and the redescriptions of this species and *repletalis* given by Fletcher (1926).

Family NOCTUIDAE

Agrotis ipsilon (Hufnagel)

Noctua ipsilon Hufnagel, 1766, Berl. Mag. 3: 416.

SPECIMENS EXAMINED: 1♂, Tucker Cove, found alive in Tech. Bldg., 20.XII.1961, Gressitt; 2♂♂, 1♀, Beeman Camp, caught inside, 12.III.1962, Rennell; 1♂, *ibid.*, 12.XII.1962, Rennell; 1♂, Beeman Station, in building, 18.II.1963, Wise; 1♀, *ibid.*, at light, 18.II.1963, Wise; 1♂, Mt. Lyall, 400 m, under stone, 19.II.1963, Rennell; 1♂, Beeman Camp, at light, 21.II.1963, Rennell; 1♂, 1♀, Beeman Camp, 20 m, in building, 7-14.II.1963, Rennell; 1♀, east end of Courrejolles Pen., 240 m, in small cave, 12.II.1963, Rennell.

DISTRIBUTION: Europe, Sachalin, Japan, Korea, Ryukyu Is., Taiwan, China, French Oceania, Australia, New Zealand, Chatham Is., Auckland Is., Campbell I., N. America.

This species is here recorded for the first time from Campbell I. Salmon (1956) recorded it from the Auckland Is.

Note: Two additional species not found in the present collection were recorded from Campbell I. by Salmon & Bradley, each as the type of a new genus:

Cosmopterygidae: *Reductoderces fuscoflava* Salmon & Bradley, 1956

Tortricidae: *Sorensenata agilitata* Salmon & Bradley, 1956

LITERATURE CITED

- Enderlein, G. 1930. Die Insektenfauna der Campbell-Insel. SitzBer. Ges. Naturf. Fr. Berlin 1930: 251-57.
- Hudson, G. V. 1909. General notes on the entomology of the southern islands of New Zealand. Subantarctic Is. New Zealand 1: 58-66, pls. 2-4.
- 1928. The butterflies and moths of New Zealand. Wellington, 386 pp., 63 pls.
- Meyrick, E. 1909. Lepidoptera from Auckland Island. Subantarctic Is. New Zealand 1: 70-74.
- Salmon, J. T. & J. D. Bradley. 1956. Lepidoptera from the Cape Expedition and Antipodes Islands. Rec. Dominion Mus. 3 (1): 61-81 (Salmon: 61-64, 77-81; Salmon & Bradley: 64-77).
- Viette, P. E. L. 1954. Une nouvelle espèce de Lépidoptère brachyptère de l'île Campbell. Ent. Medd., Copenhagen 27: 19-22, 1 fig.